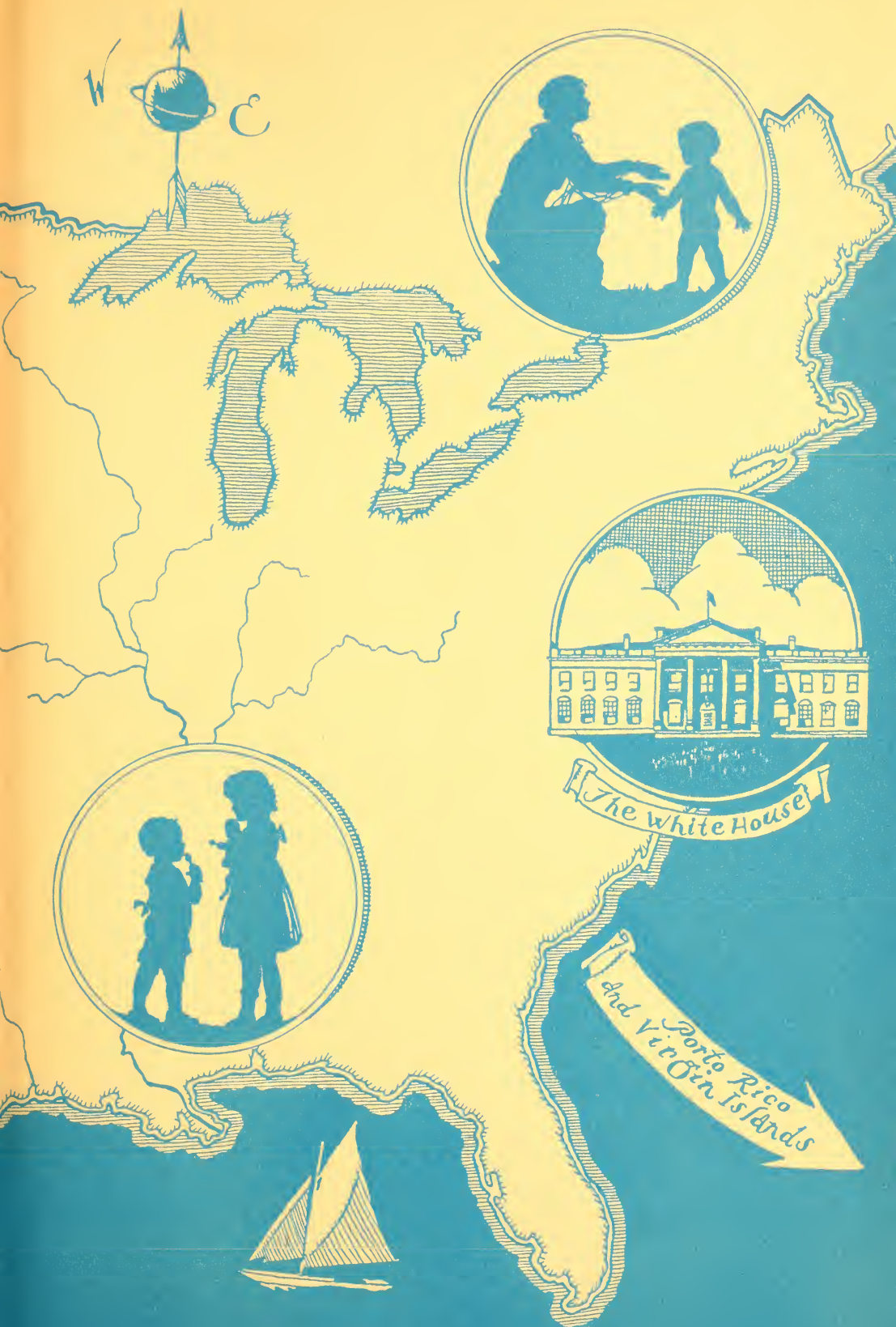



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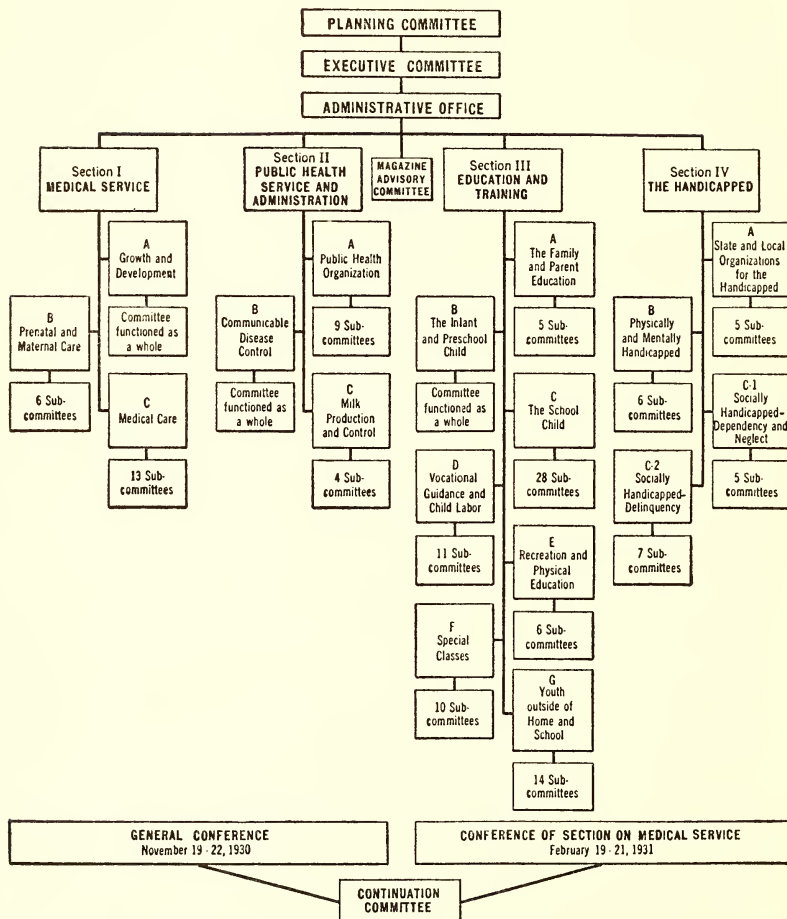
WHITE HOUSE CONFERENCE
ON CHILD HEALTH AND
PROTECTION

Called by
PRESIDENT HOOVER



WHITE HOUSE CONFERENCE ON CHILD HEALTH AND PROTECTION

Called by President Hoover



SECTION III—EDUCATION AND TRAINING

F. J. KELLY, PH.D., *Chairman*

Committee on

THE FAMILY AND PARENT EDUCATION

LOUISE STANLEY, PH.D., *Chairman*

THE HOME AND THE CHILD

III. For every child a home and that love and security which a home provides; and for that child who must receive foster care, the nearest substitute for his own home.

VII. For every child a dwelling place safe, sanitary, and wholesome, with reasonable provisions for privacy; free from conditions which tend to thwart his development; and a home environment harmonious and enriching.

From THE CHILDREN'S CHARTER.



Courtesy of U. S. Bureau of Home Economics, Department of Agriculture.

HER OWN CHAIR AND BOOKS AND LOW SHELVES FOR HER TOYS.

THE HOME AND THE CHILD

HOUSING · FURNISHING · MANAGEMENT
INCOME · CLOTHING

REPORT OF THE SUBCOMMITTEE ON
HOUSING AND HOME MANAGEMENT
MARTHA VAN RENSSELAER, *Chairman*

WHITE HOUSE CONFERENCE ON
CHILD HEALTH AND PROTECTION



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Dedicated to

THE CHILDREN OF AMERICA

WHOSE FACES ARE TURNED TOWARD THE LIGHT
OF A NEW DAY AND WHO MUST BE PREPARED
TO MEET A GREAT ADVENTURE

SECTION III

EDUCATION AND TRAINING

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FOREWORD

The White House Conference on Child Health and Protection, Subcommittee on Housing and Home Management, has considered carefully those physical factors which govern the life of children in the home to determine the effect of present-day situations upon their health and development. The findings show that it is impossible to adjust modern life to the old established conditions governing the housing of the family and the management of its work.

If the home remains static in this fast changing society it is not meeting the needs of the child. The industrialization of society has affected the home profoundly. Formerly children learned from their parents trades which they would follow in after life. Children were an asset in the home where industrial activity centered; now they are a liability. Much of their education and recreation and guidance are subsidized by outside agencies. With industrial and social life offering more and more stimulus, making increasing demands, the home has lost much of its old meaning. The entire family spends less time than formerly in homes and more time in the community.

The home is bound to survive if it retains what is worth preserving in the past and adjusts itself to the present and future social demand. Thus considered it continues as a background of security and a restful retreat where the child may expect to find a healthy development.

The Subcommittee has studied the activities left in the home and the housing of the family in the light of the direct contribution they make to family life and with special reference to the life of the child. The material brought together represents a social approach to home problems—the house plan, the furnishing and equipping of the house, clothing and feeding the family, management of income and of the time

and work schedules of the home. It recognizes the need of creating esthetic standards in the home environment to arouse children's appreciation of beauty and to develop imagination and creative ability. In the study of income it considers methods of budgeting and expenditures of incomes of different levels which will insure desirable homes on available incomes in the interest of children's welfare. Its object is to suggest and encourage technics and skills in order to secure a philosophy of living and wholesome attitudes on the part of the family group.

The Subcommittee's work on housing has been done by men and women who have accomplished much in the field of architecture and social service through their profession. It is devoted to a study of standards of housing beneficial to the child.

The recommendations of the Subcommittee look toward the modifying of those activities and situations of lesser value in the home in the interest of those which bring larger satisfactions.

The Subcommittee work represents a year of study and is the pooling of contributions from various fields to meet the needs of the developing boy and girl in the home and to prepare them for a changing world in which they are to live.

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THE HOME AND THE CHILD

THE HOME AND THE CHILD

INTRODUCTION

THE quieter, more stable, and broader proportioned home life of an earlier day produced an environment that lent itself to the normal development of the child. Evaluations which we are called upon to make today were unnecessary, but the rapidly changing and shrinking home challenges us to consider the effects which the new social adjustments so immediately reflected in the home have upon the welfare of children. We must find sound measures, apply sure tests to determine the strength and the weakness of the home plants in which the children of the Nation are reared.

For these and other reasons the White House Conference on Child Health and Protection naturally turns its investigations to the home, or whatever exists as its equivalent, in its relation to the development of children.

In these investigations, home economics—the meeting place of the fields of science and art—has an opportunity to gather up the subject matter of these fields and to open the way for its practical application in the interests of the family group of which the child is the center. Children need all that home economics—in the fullness of its application of science, art, psychology, economics, and sociology—can contribute to safeguard their health and to produce that environment best fitted for their development.

This published report sums up the findings of contemporary workers in the field of home economics in some of the phases of home environment—the house, its equipment, its management, the management of the family income, and the selection of clothing—as they affect the child. Its

aim is to state some of the existing tendencies and problems in the hope of preparing the way for their solution.

The home is a shelter. Its business is to protect children from those disturbing outside influences with which they are too inexperienced to cope.

Many houses now in use were designed for another day when labor supplies and social conditions were different. The present problem, then, is not only to plan, furnish, and equip the houses we build to protect children, but to adjust family life to our existing housing system, or to modify floor plan, furnishing, and equipment to satisfy the economic, social, and art demands of present-day families, to provide a place of retreat, and to secure the protection which the human being demands of the home.

The home, however, involves not only the house and all the personal factors of family life, but those factors of the physical environment ordinarily spoken of as housing conditions. Housing conditions as they are dealt with here include not only the design, planning, construction, and maintenance of the house, but of the premises and neighborhood in which it is situated.

The report on housing deals with the problem of presenting those conditions of housing which are most favorable to the growth and development of children.

The task of the Committee on Furnishings and Equipment has been to study the influence of home furnishings and equipment on the physical, the social, and the mental development of children, to find out what scientific studies have been made in this field, and in the light of existing conditions to offer desirable standards and suggest possible lines of research.

There was little data to draw on in this field. The home has held to its traditional seclusion. Experience in the rapidly developing nursery schools offers much, however, that is applicable to the home, in the selection of furnishings and the relation of furnishings to problems of child-training. Research has included studies on the color preferences of children, the effect of sleeping postures and of noise

upon the child. Although that was not their main object, the findings of these studies have in some degree influenced the selection of furnishings and equipment in relation to children.

The smooth-running, ordered household contributes to the development of children for two reasons: first, because it frees the time and the energy of the adult members of the family for the needs of the children, and prevents those situations, always detrimental to their development, which arise out of haste and irritability; second, because it provides an environment in which both boys and girls may develop a wholesome attitude toward home life and prepare for their own future home-making. But to evaluate the management of the home in the same terms as the guiding of the machinery of a great industry is not easy. The factors which enter into the management of the home plant are too subtle, too difficult to reduce wholly to measurable terms. Many of these factors affect the development of the child for good or ill, but to what extent and how?

Money problems of the home are considered basic in family adjustments. When these problems are not wisely and cooperatively solved by the family they are destructive alike to adult and child.

Young people need help from home economists in learning not merely the cost of maintaining a home for two people, but in determining the amount necessary to do justice to the first child, the cost of insuring normal standards of living for the family through a period of years, the income necessary to provide health protection and an adequate education for the children. All of these facts, which definitely lie within the field of home economics, should be introduced into the education of young people. It is part of the task of home economics workers to devise means of promoting this essential education.

The report on management of income discusses the mental and physical health of the child under certain income situations; deals with the problems of helping the parent in long-time planning of expenditures with special reference to

the development of the children; analyzes standards upon which various budgets may be worked out and the annual cost to families on different income levels of children of different ages.

Again, census reports indicate that a very large percentage of families have an income inadequate for the proper rearing of children. It is desirable to determine how children will fare on such incomes and how and to what extent society must help. An essential and difficult task is to find in each community an income level which will afford the highest development of its future citizens. The tasks of guiding children in assuming the responsibility of earning and spending, and of training them for an equitable division of labor in the upkeep of the home have also received consideration.

There is much to be learned about clothing from the points of view of artistry, physiology, and psychology. This phase of material living which so strongly affects the health, the happiness, and the confidence of children as well as of adults remains almost wholly in the realm of the haphazard. It is imitation and mode which largely guide us. Clothing must be studied with reference to our changed social and economic conditions. Studies of such questions as the relation of clothing to the behavior of the child, to the development of his social sense and to his physical well being must also be made.

HOUSING

HOUSING

THE house in which a child spends the early years of his life is intimately associated with all the first impressions which shape his later attitudes, and affects in many ways his development. The house is to family life what the body is to the individual. It should express the highest standard which the income can provide.

In planning the house with the thought of children in mind, it must be considered from the point of view of their health needs, their safety, and general welfare.

Since sunshine, fresh air, and pure water are essential to the health of the growing child, the house in which he lives should meet these needs. Ideally, it should be planned to secure sunshine in every room, with doors and windows placed to insure a circulating supply of fresh air. It should have a heating plant equipped to regulate both the temperature and the humidity, and a modern plumbing system at once adequate and sanitary.

The child needs also long hours of undisturbed sleep. For this reason not only should houses contain rooms sufficient in number and so arranged as to secure privacy, but, through regulation of housing and community conditions, residences should be located on streets on which there is relatively little through traffic.

Somewhat less obvious, but nevertheless important, is the effect of comfort and convenience of the house on the health of the child. Needless inconveniences and discomforts which result from improper planning of the house or from inadequate or poorly selected equipment are sources of irritation and often of ill health. Reacting unfavorably upon the tone, quality, and happiness of family life, they eventually affect the welfare of the child.

The well being of the child also requires relative cleanli-

ness of premises, and proper removal of household waste; protection from excessive heat and cold, from escaping coal gas, and from leaking gas fixtures; adequate provision for refrigeration of food and the preparation of meals; for lighting arrangements that protect the eyes from strain—in short, adequate provision for sanitation, safety, and cleanliness.

Safety is one of the important considerations in any house but it is especially important in houses in which children live. The house should be so built that the child is protected from the hazards of fire, of dangerous structural conditions, and from falling or needless bumps or bruises that may result from defective planning or equipment. Absolute safety even in the best-planned house is impossible. During his earlier years the child requires a certain amount of supervision to protect him from hard knocks and unnecessary falls. He must be trained to avoid playing with lighting fixtures and to keep away from stoves and fireplaces. Nevertheless, if proper attention is given to these matters in planning the house, much can be gained in sparing anxiety to the mother and in saving the child from possible injury.

In drawing up the housing standards presented here the safety of children has been considered, especially in those provisions which deal with fireproofing, with lighting and heating equipment, in suggestions for low handrails on stairs, and for gates at top and bottom, and in advocating placing of residences on minor side streets to avoid traffic dangers and to provide for protected play in the backyard.

To some extent also, housing conditions affect the mental, moral, and spiritual health of the child. There is no one factor in personality development more essential than privacy. Ideally the house should be so planned that each child may have a room of his own in which at times he can be by himself. Children require a place, also, where they may carry on their own legitimate activities unhindered and unhampered; in other words, a place where they may play or work without interference from or conflict with the activities of the adult members of the family.

But they need, as well, those influences of wholesome family life and happy domestic relationships which are achieved through comradeship between parents and children and cooperative activity in fields of mutual interest. The common meeting rooms of the family must be planned with these needs in mind—dining and breakfast-rooms sunny, cheerful, and comfortable, and the living-room with the grouping of comfortable furniture around the fireplace and a pleasant spot for every member of the family.

HOUSING STANDARDS: GENERAL

Less than 3 per cent of our population is accommodated in new dwellings each year. The vast majority, therefore, must live in old houses, and it must be frankly recognized that the standards drawn up here are far from what the mass of the people are able to enjoy at the present time.

These standards, however, represent desirable and reasonable objectives which everyone interested in housing and child welfare may consider as goals toward which to work. They may also serve as a guide for parents when buying or building a home.

The Division of Building and Housing of the United States Department of Commerce reports as a result of its studies, that outside of two or three of our largest cities a relatively small proportion of families with children live in multiple dwellings. Therefore, in drawing up these standards, little specific mention has been made of apartment houses.

Rural and village families, which constitute nearly half of our population, and families in small towns and suburbs, in the vast majority of cases, live in detached residences which are better adapted to the needs of children than are multiple dwellings. Wherever it is necessary for families with children to live in apartment houses, these should be fireproof, sanitary, and wherever possible, of the garden type, with careful planning of the buildings for sunshine in all apartments and rooms, and with provision for playgrounds and inside play space for children.

While arrangements for heating, lighting, and plumbing may be more primitive in rural than in city districts they must be rendered safe and healthful; and it should be recognized that provision for a safe and ample water supply, adequate plumbing, and facilities to render housework as easy as possible are essential.*

Standards give something toward which to work. Though it is realized that certain standards relating to equipment and fireproofing and to the provision of a play-room or nursery seem to many contractors, realtors, and home-builders to be out of the question, it is possible to incorporate most of these in new dwellings for any income group. Old homes, defective in many particulars, may be brought up to standard step by step, beginning with those matters which, with the more fundamental needs of the child in mind, seem most urgent. Where defects exist in the home they may be entirely overcome or at least so remedied as to prevent injuries.

In those cases where the standards suggested here seem impractical, because of their cost, they may result, if judiciously applied, in reducing maintenance costs and enhancing the sales value of the property. In cities, building codes and zoning laws, already effective, are leading to the incorporation of many of these standards in all new construction, and

* There will be little difficulty in applying these standards to farm homes and other homes in rural districts. Certain specific requirements as the following which apply only to farm homes have not been considered by this Committee. These include the proper placement of the house on the site in its relation to other farm buildings to avoid drainage from barns, disagreeable odors, dust from unpaved roads, and other provisions relating to the home site that would affect the health and comfort of the family; size and arrangement of rooms which would allow for ease and comfort in preparation and serving of meals to farm workers during the entire year, and provision for this comfort for such workers; entrances and passageways for convenience, provisions for canning of fruits and vegetables, additional laundry space, sufficient storage space for supplies, provision for safe and ample water supply, for adequate plumbing, and facilities to render housework as easy as possible. Equipment for lighting and in some instances also for heating as well as for sanitation, may have to be somewhat primitive but should be rendered safe and healthful. As the various types of farming will obviously affect the requirements for the farm home, few of those special requirements are mentioned in the standards.

For farmhouse standards see "Planning the Farmstead," by M. C. Betts and W. R. Humphries, *Farmers' Bulletin* 1,132, U. S. Department of Agriculture.

improvements in such laws from time to time continue to raise the building requirements. In general, however, such legislation provides only for that protection of health and safety which seemed practical and expedient at the time the law was framed. Progressive improvement of such laws helps to make these standards increasingly available even for those citizens who are unaware of them and of their importance. While through city planning and zoning, the amenities of life are becoming available to city and suburban population to an increasing extent, it is impossible through law alone to provide universally all of the conditions that are essential to wholesome living.

Through consideration of the following suggestions (which are based on studies made by leading specialists in the field of housing and home economics), housing, it is hoped, will be considered more and more with reference to its effect upon the health, protection, and welfare of children. No other aspect of the subject is so important as this. It is the prerogative of parents to make any necessary and reasonable sacrifices which will give their children a better start in life and a better chance to grow to full mental, moral, and physical stature than they themselves had.

HOUSING STANDARDS: SPECIFIC

NEIGHBORHOOD

1. The neighborhood should be primarily residential. Homes should not be located within an industrial district.

2. It should be protected by zoning laws, supplemented, where necessary, by deed restrictions.

It is perhaps the usual rule that zoning regulations should be supplemented by deed restrictions. Carefully drawn deed restrictions should apply to all lots in residential districts, whether sold or unsold. They should not be on the verge of expiration and they should be drawn in such a way as to permit of modification under proper safeguards every twenty to thirty years.

3. The preferable location for a home is on a minor street so planned that it does not invite through traffic.

In cases where apartment houses or single-family houses are located on major streets provisions should be made for adequate set-backs, for the planting of roadside trees and grass borders, and for protection from traffic dangers.

In new subdivisions, it is better to have streets run northeast by southwest, and northwest by southeast to obviate the possibility of rooms with due north exposure.

4. Residences should be located within relatively easy access of churches and schools, and civic, cultural, and shopping centers.

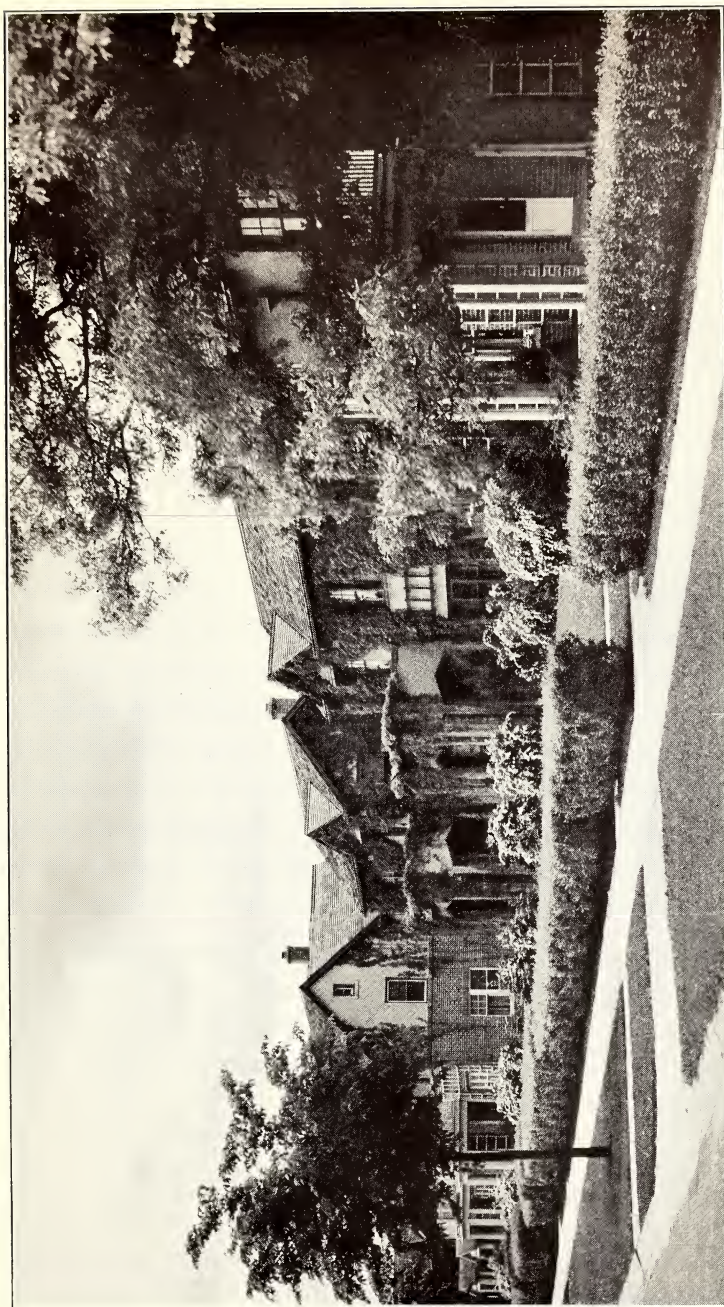
Reasonable proximity to places of employment for each of the working members of the household should also be taken into consideration, so that a minimum of time will be lost in transit between work and home and a maximum amount of time available for family life and for common activities of parents and children.

5. Neighborhood stores should be so located as not to be detrimental to the residential character of the neighborhood and so designed and treated with reference to set-backs and planting as to enhance the attractiveness of the district they serve.

6. Neighborhoods should, in so far as possible, have charm and distinction and be free from ugliness and monotony and conditions which tend to depress or to humiliate the family. Street trees and grass strips should be provided on all residential streets and there should be frequent small parks within the district.

In neighborhoods where there are row houses or detached houses built from identical plans, individuality can be secured through planting and by the use of attractive window boxes, porch and garden furniture.

7. Children should not have to depend upon the street for their play. Play space should be provided either in indi-



Courtesy of Better Homes in America.

A RESIDENTIAL STREET WHERE HARMONY OF DWELLINGS AND BEAUTY OF LANDSCAPING ARE
COMBINED WITH MANY PRACTICAL FEATURES.

vidual yards, or in yards thrown together, or in accessible and safely approached neighborhood playgrounds, adequately equipped and supervised. Careful attention should be paid to the landscaping of the playgrounds, in order to provide shade trees at locations which will not interfere with play activities, and shrubs, hedges, or grass borders so that the playground may not detract from the appearance of its neighborhood.

8. Residences should not be unduly near railroads, aviation landing fields, public garages, stables, dumps, marshes, or obnoxious industries.

9. The neighborhood should be reasonably free from smoke, dust, odors, fumes, noise, and heavy traffic.

10. Residences should not be located on land that is frequently flooded or so low that it is damp or subject to difficulties in sewage disposal. Areas of low-lying land improperly or insufficiently drained and areas of made land where decayable matter has been used to make the fill should be avoided as residence sites.

11. The neighborhood should be free from "moral nuisances" such as disorderly houses, centers of liquor traffic, and gambling houses.

12. Alleys are objectionable in residential districts and should not be planned in new subdivisions. Existing houses fronting on alleys should be abandoned under a comprehensive plan.

13. Steep grades should be avoided in streets.

HOUSE LOT

1. House lots should be wide enough so that each room will have sufficient light from open spaces on its own lot without depending upon that from neighboring lots.

The problem here is to provide adequate light and

sunshine for the middle rooms of houses which are more than two rooms deep. Front and back rooms can secure their light from street and yard, but the middle rooms are dependent upon light which comes over the roofs of neighboring dwellings and hence require wider side yards.

2. Suitable play space should be provided in the yards to supplement neighborhood resources and should be so located that the play activities of small children can be observed easily by the mother while engaged in her daily routine.

3. If outdoor space for drying clothes is provided it should be properly screened so that the neighborhood will not be rendered unattractive. Vine-covered lattices and hedges usually make the most satisfactory screens.

4. The lot should be properly graded or drained so that there will be no standing water.

5. Trees, shrubs, and vines should be planted in such a manner that they provide an attractive setting and furnish shade and privacy.

6. Private garages and any out-buildings should be easy of access, fire-safe, and so placed that they do not interfere with the lighting of neighboring residences or with their attractiveness of outlook.

7. Proper provision should be made for the storing and disposal of garbage, rubbish, ashes, and other household refuse. These should be kept in covered, fireproof, water-proof, rust-proof containers of ample capacity, so placed and maintained that they will not interfere with the healthfulness, appearance, or attractiveness of the premises.

HOUSE EXTERIOR

1. The house should be so designed and placed upon the lot as to provide for adequate sunning and natural lighting

of all rooms. There should be direct sunshine at some time of day in each room throughout the year. No room should have only a north exposure.

Sunshine is recognized as one of the most important means to vigorous health in childhood, and as circumstances often make it necessary to keep children indoors at various ages, the adequate sunning of rooms is one of the most important aids to child health. In planning new houses it is possible to place them at an angle to the points of the compass so that there will be no north rooms, but if the street layout of the city is such as to make north rooms inevitable the planning should provide for additional windows to either the east or west. The north rooms would therefore be corner rooms.

2. Covered porches should not be so placed as to reduce unduly the natural lighting of rooms. No room should receive its sole natural light from windows opening upon covered or glassed-in porches.

3. Ugliness, excessive ornamentation, and unpleasant color combinations should be avoided in the exterior of the home. The best effects are ordinarily secured through simplicity in the architecture.

4. All materials in house construction should be sound and durable. Houses should be well built in every respect.

5. Houses to be safe should be resistive to fire.

There is considerable loss of life annually of children in America because of the prevailing practice of building houses that are not fire-resistive. To families or communities that consider it impossible to reach ideal standards of construction immediately, it might be stated that the minimum of protection for houses includes fire-resistive roof coverings and exterior walls, adequate fire-stopping between studs to prevent passage of fire through walls and floors, protection around sills and pipe openings, and the use of fire-resistive materials to protect

adequately all portions of the house where lighting or heating equipment may be a source of danger or through which fire might spread. Chimneys should be well built and properly flue-lined.

6. Foundations should be damp-proof, sound, and durable. Houses should be securely anchored to their foundations and the roofs should be securely anchored to the house.

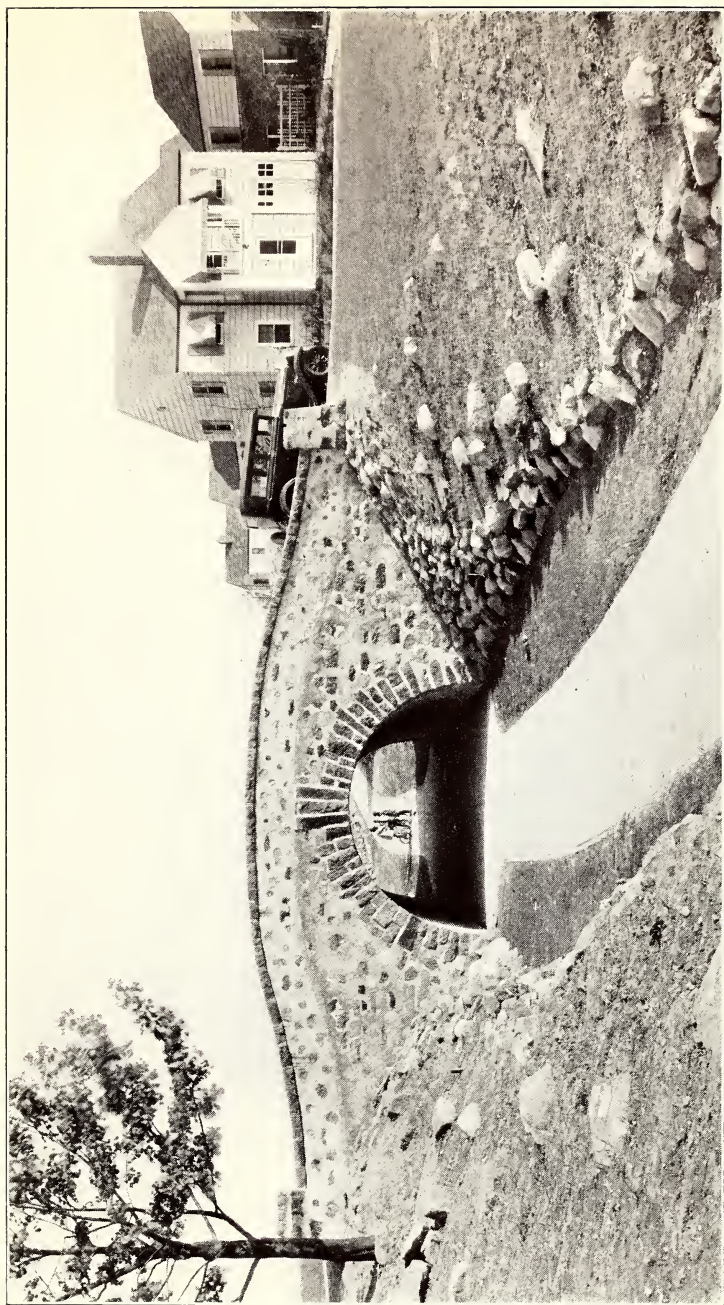
7. Buildings should be properly insulated against dampness, heat, cold, and sound.

8. Houses should be kept in good repair in all their parts.

Construction and maintenance should be such as to prevent dilapidation and disrepair, such as loose railings and rotten boarding. Special attention should be paid to the use of materials and methods of construction which experience has demonstrated to be safe, or to new materials and methods of construction which give reasonable promise of being satisfactory. Construction and maintenance should keep roofs and walls free from leaks, and rain gutters and leaders should be so placed as to prevent accumulations of rain water and should be made free from clogging and leaking. There should be insulation against dampness and ventilated air-space under the roof to protect from extremes of heat or cold. Depending upon climatic conditions the house should be properly insulated against heat and cold.

HOUSE INTERIOR: GENERAL

1. The room arrangement in the house plan should be such as to make it possible to avoid waste motion, to save unnecessary steps and to facilitate housework. There should be relatively easy access from room to room but it should be possible also to close each room off from the others when it is desired.



Courtesy of City Housing Corporation of New York.

WALK FREE FROM TRAFFIC DANGERS.

2. Each room should have adequate natural ventilation. Cross or through ventilation should be secured either by placing windows on two sides of each room or by having doors so placed in line with windows that there will be a moving current of air.

Good natural ventilation involves ample provision for the intake of outside air, for the removal of used air, and for keeping air continuously in motion. This should be possible without sacrifice of privacy or the use of artificial systems of ventilation.

3. Where climatic conditions make it necessary, air should be regulated (so far as it is reasonably possible) with regard to temperature and humidity.

4. Each room should have at least one window, but preferably two or more, opening directly on a permanent open space sufficient in size to admit adequate light and sunlight. The total window space should not be less than fifteen square feet in area. The tops of windows should be as near the ceiling as is consistent with good architectural design. Windows should be so constructed that they can be opened either throughout all of their area or at both top and bottom.

Tentative standards of the International Congress on Illumination held at Lake Saranac in 1928 suggest that at least some of the sky should be visible from table height over a considerable part of the room's area and that sunlight should be able to penetrate to at least half of the depth of the room.

In buildings in which walls are unusually thick and in regions in which the smoke nuisance is prevalent, the size of windows should be increased beyond the standards given above.

5. The room should be so designed that there will be suitable space for the principal pieces of furniture and so that these will not be placed in the way of doors, windows, or closets.

In the planning of bedrooms particular attention should be given to the provision of adequate wall space for the location of beds, with reference to cross ventilation.

Fireplaces should be located with reference to both appearance and the grouping of furniture around them.

Doors, windows, and such immovable equipment as radiators should be so placed that adequate wall space is provided for furnishings appropriate to the room.

Radiators would often best be recessed to save space and permit access to windows. They should be screened so as to protect children.

6. Rooms should be generous in size—large enough not only to accommodate the furniture, but also to give a sense of space. Ceilings should be high, especially in hot climates, in order to insure coolness, adequate ventilation, and the psychological benefit that comes from spacious quarters.

A living-room twelve by fifteen feet—one hundred and eighty square feet in area—may be adequate for most families but as the size is dependent upon the uses to which it is put by a given family no definite standard should be set.

7. The downstairs common rooms, including the living-room and dining-room and also the parlor and music-room, when these are provided, may be designed to open into one another so as to facilitate the entertainment of guests. Also, however, it should be possible to close off each room so that any member of the family may entertain personal guests in privacy.

8. The sleeping quarters should be sufficiently separated from the living quarters to insure privacy. Each bedroom should be reached without passing through any other bedroom. At least one bathroom should be reached from a

private hall. In two-story houses the provision of a wash-bowl and water-closet on the first floor in addition to the bathroom on the sleeping floor is often desirable.

9. The kitchen should be cheerful and attractive. It should be easy of access to the dining-room and so located in relation to dining- and living-rooms that noises and odors of the kitchen will not penetrate to the rest of the house.

The kitchen should be compact and, preferably, rectangular in shape. There are four major functions to be performed in the kitchen, namely, the preparation of food, cooking, serving, and clearing away. In addition to this it is desirable to have a center for the planning of household activities. This may be equipped with desk and telephone and may serve also as a rest center.

The larger built-in equipment should be grouped according to the purpose it is to serve and arranged along the walls to furnish a nearly continuous working surface.

The height of working surfaces should be adjusted to the individual worker. Working equipment should be so placed that it obviates over-reaching and unnecessary stooping.

It is desirable that in so far as possible equipment should be built in such a way as to prevent the collection of dirt and dust. It is often desirable to place the stove in an alcove with only the front accessible. Toe space under working surfaces adds to the comfort of the worker, and if cabinets are built to the ceiling there will be fewer spaces on which dust may collect. All surfaces should be smooth and easily cleaned with soap and water. There should be no unnecessary angles.

A hood over the stove to carry heat and fumes away is desirable. Gas stoves should be vented by a flue to the chimney or to the outer air.

A ventilating fan is desirable, particularly if the kitchen is not provided with cross ventilation. This fan should be located in an outside wall near the ceiling and the stove.

Windows should be above working equipment and, as far as possible, located for a pleasant view and for supervision of outdoor play-space.

10. A nursery, if provided, should be light and cheerful. The walls should be of hard finish and walls and floors smooth and easily cleaned.

The following detailed suggestions have been drawn up by teachers in the nursery schools maintained by Cornell University and are submitted as suggestions to families that are in a position to provide a special room for this purpose.

The floor area should allow at least eighty-four square feet for each child. Artificial lighting should be high and indirect. If side lights are used they should be out of the child's reach and the light source shielded. Since most of the child's play is on the floor, hardwood floors or floors overlaid with battleship linoleum or cork are recommended. The bed space for the child should be away from the area in which the toys are kept.

The nursery should be situated near a lavatory and near the mother's work center in order to save her time and steps and at the same time provide the child with necessary supervision.

This room should be convertible to other uses when there is no longer need for it as a nursery.

11. In cold climates entrances should not admit directly into the living-room or kitchen. In general, direct entrance to the living-room is not desirable.

12. Steep stairs should be avoided. Landings should be broad. Triangular turns on stairs are unsafe and undesirable. Handrails or balustrades within the reach of young children should be provided on all stairs, including those leading to the cellar and attic. All stairs should be adequately lighted and where there are young children it is often advisable to place gates at the tops of stairs.



Courtesy of U. S. Department of Agriculture.

A PLAY PLACE SHADED BY TREES WHERE MOTHER CAN WATCH
AS SHE WORKS.

13. Closet space should be ample for the needs of each member of the family and should be so located as to serve its purpose most conveniently.

There should be a closet for outdoor wraps on the entrance floor near the outside door, which can be reached without passing through any of the rooms. There should be a separate closet for children's outdoor wraps or else special provision should be made for them in this closet through low hooks and rods and low shelves or other special equipment for overshoes.

Clothes closets should be provided with rods, and of sufficient depth to freely take clothes hangers with clothes upon them.

Broom closets should be located in the back-hall entry or kitchen.

Linen closets should be located in the hallway of the sleeping quarters and close to the bathroom.

All closets should have doors, and knobs on the inside so that they can be opened by children.

14. Storage space ample in amount, reasonably accessible, free from dampness, and properly lighted by natural or artificial light should be provided for household possessions. This includes space for the storage of vegetables and fruits, trunks and bags, coal, wood, and other fuel, and for children's outdoor play equipment and seasonal or temporarily discarded possessions.

15. Some place should be provided as a playroom for children. In case the extra room cannot be afforded by the family a corner of a bedroom, nursery, enclosed porch, or of some other room, or in the case of older children a portion of a well lighted and well ventilated shed or attic may be used for this purpose. As the playroom is outgrown it can be converted to some other use appropriate to the needs of the family. Low drawers and cupboards or other special provision should be made for children's playthings.

16. There should be adequate provision for privacy for

each member of the family. Each child should have a place where he can be quiet and undisturbed and have an opportunity for uninterrupted study of home lessons or for reading or playing.

17. There should be a workshop in which the men and boys of the house can putter. This usually can be located in a dry, sunny, well ventilated basement, shed, garage, or attic.

18. Sleeping arrangements should be made with due regard to uninterrupted sleep, health, reasonable privacy, and the individuality of the child. Generally a sleeping room for each person is advisable. It is undesirable to have two children occupy the same bed whatever their age.

19. Paints and wall coverings, in both color and texture, should be cheerful, restful, attractive, and not overstimulating. Woodwork and walls should be easy to keep clean.

20. Floors should be strong, smooth, tight, and level, comfortable to stand and walk on, durable, and easily cared for. In color, design, and finish they should harmonize with the rest of the room. They may be of wood, cement, tile, linoleum, cork, or other composition, according to the purpose to be served. If of wood, the boards should be well-matched hardwood, preferably quarter-sawn. Tile should be laid on cement. Linoleum should be cemented to the floor over a layer of felt.

21. Repair of all surfaces, floors, stairs, ceilings, and walls should be adequate for safety.

FUNDAMENTAL EQUIPMENT

1. Water supply should be adequate in amount, clean, and free from pollution. There should be conveniently located outlets in kitchen, bathroom, and cellar, and for outside use in watering lawns and gardens. In rural districts or those beyond the reach of municipal water supply, the well or spring should be so situated and protected as to avoid

contamination. The water should be piped into the house and if necessary provision should be made for adequate protected storage. An ample supply of hot water is essential.

2. Modern sanitary plumbing fixtures, noiseless, easily flushed, cleaned, and vented should be provided. All pipes should be of durable type with tight joints and traps readily accessible for cleaning or repairs. Water-closets should often preferably be located in compartments separate from the bathroom, well lighted and ventilated to the outer air. Water-closet accommodations should never be located out-of-doors.

3. Heating appliances should be of such types and sizes as will heat all parts of the house adequately. As there is danger of overheating as well as of underheating it is often desirable to provide for thermostat control. Provision for humidification is also desirable.

4. Artificial lighting should be installed so as to avoid dangers from fire. It should not cause eye-strain. Outlets should be sufficient in number and so located as to make it possible to engage in any kind of household activity such as cooking, serving of food, cleaning, play, or studying under conditions that are convenient and comfortable. Too intense lighting should be avoided.

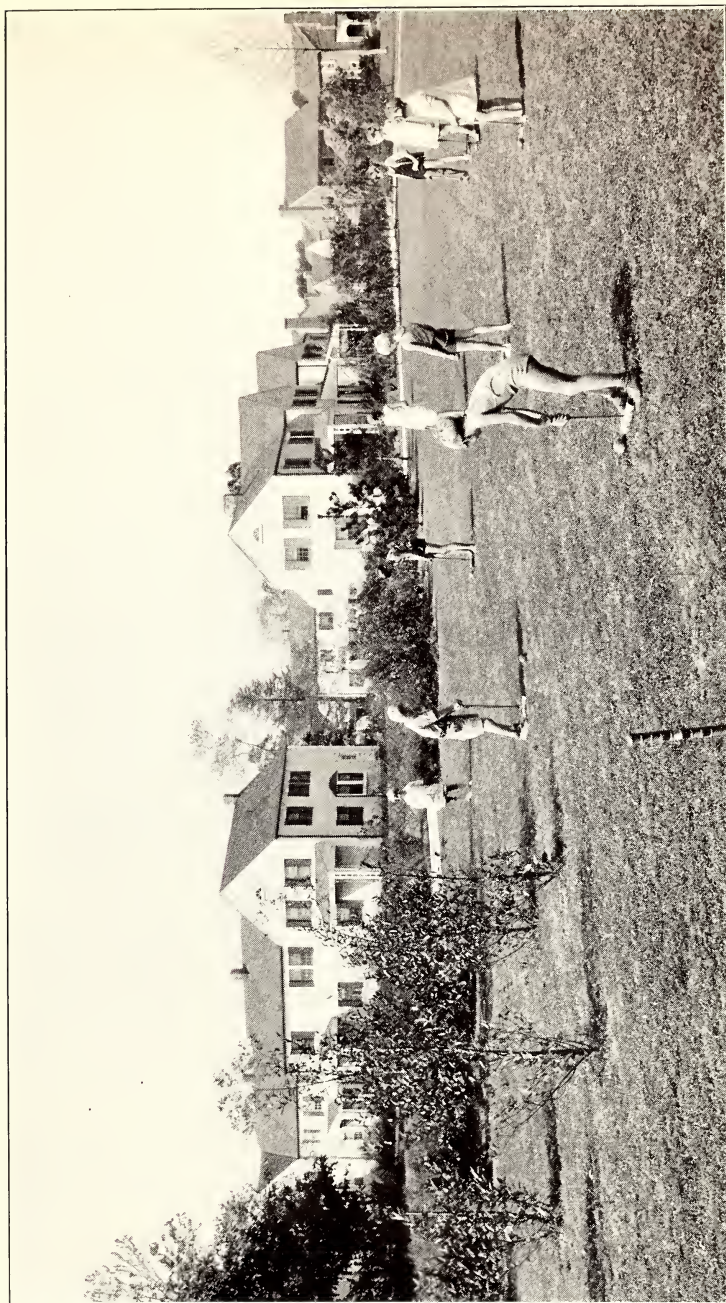
5. The refrigerator should be designed for thorough circulation of cold air. Proper insulation requires an efficient heat-retarding material of adequate thickness between inner and outer walls. This material should be compact, non-deteriorating, moisture- and germ-proof, and odorless. All parts of the refrigerator should be easily cleaned. Proper drainage should be provided. The drain pipes should be easily accessible for cleaning. For mechanically cooled refrigerators further requirements are: quiet, dependable, and economical automatic operation; minimum of service maintenance; freezing of water in a reasonable length of time;

accessibility for repairs; freedom from wear of moving parts; safety of operation of exterior moving parts, of electrical apparatus, or of burners. The refrigerator should be level and should be placed in as cool and protected a position as is compatible with convenient service.

6. Desirable built-in equipment includes kitchen cupboards, preferably flanking the sink, built-in ironing boards, a passway between kitchen and dining-room, china closets, book-shelves, window-seats with storage space underneath, shelves and drawers in linen closets, low drawers, cupboards and hooks for children's toys and other possessions in the play rooms or the children's bedrooms. Each of these should be planned with a view to convenience in use.

7. All electric wiring and equipment, including the radio, should be installed according to standard safety practices and certified by the properly constituted public authorities and by fire underwriters. The installation of electric apparatus near sinks, laundry tubs, bathtubs, and lavatories where shock hazards from heedless use are greatest should be avoided. Non-absorptive insulating sockets for fixtures near such conveniences are a wise safety precaution. Fuses and switches should be enclosed and so located as to be inaccessible to children. To permit maximum service an ample supply of base plugs and double convenience outlets is desirable. Hall lights and lights for cellar stairs should be controlled by three-way switches at top and bottom of stairs.

8. Shut-off cocks for gas meters should be accessible and controlled by a locked box and manipulated only by representatives of gas companies. The installation of slot meters should be avoided. Open-flame gas jets are a fire hazard and should not be used. Gas or other open-flame lighting fixtures should not be located near windows or other places where draperies may be hung. Gas ranges or water heaters and gas logs should have direct connection with chimney flues. Hose connections for gas stoves, table lamps and



Courtesy of City Housing Corporation of New York.

WISE IS THE COMMUNITY WHICH PROVIDES A COMMON PLAY SPACE FOR ITS CHILDREN.

other gas apparatus should be placed several inches away from control cocks for lighting fixtures. Gas ranges should have automatic lighters.

RECOMMENDATIONS

The Committee on housing standards makes the following conclusions and recommendations:

Although the house and its surroundings are the chief physical environment of the child, scores of thousands of dwellings throughout the United States are below any reasonable minimum standard, and most of the remainder may well be improved so as to serve more fully the needs of the child in the maintenance of health, protection of life, and moral growth.

All groups connected with the Conference should bear in mind the importance of improving home environment as an indispensable factor in realizing their aims.

Means for informing parents and public and private agencies for social welfare should be carefully promoted and cultivated, with recognition of the value of discussion programs, contests, and exhibits. Demonstrations of well built, well designed, and carefully equipped homes, directed by disinterested, non-commercial committees representing civic agencies, home economists, architects, and other specialists in one phase or another of housing have proved especially valuable.

Local home information centers under competent, disinterested auspices should be encouraged as a means of providing parents at all times with the best available information relating to all phases of home improvement and as a center also for classes for adult education in home care of children.

The importance of continuous local programs for home improvement under local initiative and self-government is recognized. Endowed research in this field and dissemination of findings and of advice to local committees, and

stimulation of local activities by endowed organizations nation-wide in scope, would supplement and render more effective the research and informational services of the departments of Federal and State governments concerned.

The President's Conference on Home Building and Home Ownership is urged to have a committee representing home economists and specialists in child welfare and in housing. This committee is to draw up recommendations for instruction on housing in civic classes and home economics classes of public schools and colleges, and consider preparation of textbooks and syllabi for such instruction.

Housing needs of children should be taken into consideration by all committees of the President's Conference on Home Building and Home Ownership with a view to the discovery of the most practical means of eliminating factors that injure the health and thwart the development of children. Means and policies that aid such development should be promoted.

Older urban areas which are likely to be used in the future as residence districts should be reconditioned and brought up to standard. Obsolescent and inadequate types of rural housing should also be brought up to standard in the ways that are practical.

Adequate attention to housing should be paid by appropriate departments of State and municipal governments.

The optimum standards for housing which the Committee on Housing drafted with reference to the health, protection, development, and welfare of children are submitted as objectives.

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FURNISHINGS AND EQUIPMENT



Courtesy of New York State College of Home Economics.

MEALS ARE HAPPIER WHEN TABLES AND CHAIRS FIT AND
DISHES ARE A CHILD'S VERY OWN.

FURNISHINGS AND EQUIPMENT

THE child—beloved as he is—is often an alien in his home when it comes to any consideration of his special needs in the furnishings and equipment of the home. He belongs nowhere. He must accommodate himself to an adult environment—chairs and tables are too big and too high for him; there is no suitable place for his books and his toys. He moves in a misfit world with nothing proportioned to his needs. Often this results in retarding his physical, mental, and social development.

This tendency to crowd out the child's interests and to restrict or confine his activities to an adult environment is attributed partially to a forced shrinkage of living space and an increased ratio of adults to children. At certain economic levels economy of space and of money are of paramount importance. The child, forced to live in the midst of restrictions and among things which may be neither beautiful nor useful to him, possibly suffers more than the adult from limitations resulting from these economies.

Economic and social conditions are not the only factors, however, that influence selection and arrangement of furnishings and equipment. Lack of a realization of the child's developmental needs is an even stronger factor—a factor at work through all economic levels. Far too often the selection of furnishings and equipment is guided neither by good standards nor by the needs of the child and family, but is influenced by tradition, by a poor store display, by a neighbor's bad choice, or other consideration equally paltry.

Parents and leaders in general are eager for guidance in the solution of this problem, and many agencies prompted by varying motives have attempted to meet this growing demand for assistance. Educational organizations have helped through direct teaching, through publications, the radio,

films and slides, and through exhibits and demonstrations. Designers and manufacturers, some in a sincere attempt to meet real needs, others merely through interest in financial gain, have produced much in the way of suitable furnishings and equipment; other commercial agencies have given out information through varying schemes of advertising.

It is a field in which much confusion exists. There have been poorly trained workers, inaccuracy of statement, conflicting advice, unnecessary duplication of effort, poor design, and inferior quality in furnishings and equipment. The result is bewilderment on the part of the parents and workers who are sincerely concerned with providing an environment that will contribute favorably to the child's progressive development. The need is apparent for more extended knowledge and more intelligent planning in the selection of equipment and furnishings for the home. The whole subject is one in which guidance and leadership are needed and are being sought.

INFLUENCE OF FURNISHINGS AND EQUIPMENT

Selection of the furnishings and equipment with each child taking part according to his interest and ability may become a creative and joyous experience for every member of the family, contributing much to the enjoyment and richness of living, and to the education and well rounded development of the child.

Perhaps the first step in allowing a child to take part in the selection of the household furnishings is to permit him to "listen in" on the discussion which precedes the purchase of a piece of furniture or a musical instrument of interest to all the members of the family. The next is to allow him to go shopping with his parents when some piece of furniture or equipment is to be bought for his own use. When a new chair is to be selected for his bedroom, he may go along to the shop to sit in one after another to determine which is suitable for him in size and shape. As his mother decides on one of the several chairs considered, she will explain the

reasons for her choice—the chair is not only comfortable for him, but it is also good in design, strong in construction, and suitable in price.

Through such experiments a child learns what is good and what is bad. He acquires standards. Through such experiences personality develops. He gains self-confidence and power. Even when his choice is poor, it is an opportunity to learn better standards and to profit by his mistakes.

This privilege of taking part in the choice of personal and family belongings has the advantage also of creating in the child a sense of personal as well as of family pride in ownership, and eventually teaching him that his personality can be expressed through things.

As the child grows older, he may help to construct simple articles for his room or for some other part of the house, and so come to realize the joy of creating, while at the same time he develops skill in the use of his hands.

There is a give and take and an opportunity to develop social traits where a family considers cooperatively the furnishing and equipping of the home. Sometimes in considering and meeting the needs and desires of each member of the family, one individual has to give up his own choice for the best interests of the group or of another person in it. This has a real value in developing in even the youngest members a fine spirit of family consciousness, cooperation, and unselfishness. This is true, not only of the selection of furnishings, but also true of their arrangement and use. Joining in family recreation for which games, toys, and musical instruments are provided, sharing a space in a well-equipped wrap closet, and taking turns in using various pieces of household equipment—all serve as a means of cultivating desirable social traits.

The use of suitable household furnishings and equipment may definitely contribute to the physical development of children, through exercising, relaxing, and stimulating the growth of large and small muscles. The use of the large toys and play equipment for the backyard playground or the home gymnasium is important. If the children are allowed

to take an active part in household tasks, household equipment that has to do with service, such as food preparation, laundry work, and odd jobs of repairing may serve the same purpose.

These activities play a part in the mental as well as the physical development of the child, for while he is helping he is learning, and while he is using his muscles he is developing skill.

These few illustrations serve to indicate that the social, physical, and mental development of children of all ages is influenced by the furnishings of the home.

DESIRABLE STANDARDS

The furnishings and equipment of the house in general are of importance to children of all age levels. No attempt has been made here to draw up complete standards, but rather to emphasize those needs of children which differ from those of adults.

The background—walls, ceilings, and floors—should be attractive and should harmonize with the furnishings of the room. They should be sanitary, durable, easily cleaned and otherwise suited to the uses of children. The choice of color for these areas is governed by the size and purpose of the room and by the amount of sunshine and light it gets. In rooms to be used by small children it is desirable to provide a finish that is easily cleaned with soap and water; for this reason smooth surfaces rather than rough are preferable. Glossy surfaces, because of their glare, should be avoided. Floor coverings should be durable, easily cared for, comfortable, and attractive. Where there are young children, floors should be washable and warm. A rug to sit on is essential. For various reasons it may be necessary to use several small instead of one large rug, but small rugs should never be placed at either the head or the foot of the stairs. Rugs should be equipped with some device to prevent them from slipping, and when stair carpets are used they must be securely fastened down.



Courtesy of U. S. Bureau of Home Economics.

PLAYING MAKE-BELIEVE.

Window curtains should provide for privacy and at the same time permit complete regulation of light and air. They should harmonize with the rest of the room in color, texture, pattern, and in the method of hanging; and when viewed from the outside should correspond with those of the other rooms of the house and with the general character of the exterior. Curtains in rooms frequented by small children should be simple in style, of materials that can be cared for easily, and should be hung beyond the reach of small hands.

Artificial light should be adequate in amount, properly diffused and directed, pleasing in color, and free from glare. To prevent glare the light source should be as far as possible from the line of vision. Those within the line of vision should not be too bright. All light sources should be completely shielded from the eyes, and highly polished surfaces avoided. While some contrast of light and shadow is restful and attractive, it should never be excessive. Light walls and ceilings tend to prevent this. Shadows on working surfaces should be avoided, and if local light is used for reading or other close work, there should be some other light in the room to obviate too great contrast between the page or work, and surrounding space.

Lighting fixtures should be arranged for convenience and comfort and should harmonize with the furnishings of the room. There should be a sufficient number of outlets for portable lamps, and these so placed that they are not in the way or easily upset. Lamp shades, in addition to protecting the eyes from the light source, should harmonize in size, color, and texture with the lamp base and other furnishings of the room. In rooms used by children lights must be protected and out of their reach.

Furniture and equipment should be selected and arranged for durability and attractiveness, for comfort and convenience. Each piece should be suited not only to its individual purpose, but when possible adaptable to other uses. It is desirable to select furniture made of materials that neither warp nor shrink, swell nor splinter; that does not require frequent refinishing and which is upholstered in materials that

are easily cared for and of the best wearing quality that can be afforded. Good workmanship is important. It should be remembered also that bulk does not necessarily create comfort, and furniture which is to be moved frequently should be light in weight. For convenience both furniture and equipment should be grouped according to use.

Furniture for the use of children should be suited to them in size and proportion, though as far as possible it should allow for their growth. It must be without sharp corners or rough edges, sturdy enough to stand hard usage, sufficiently heavy not to tip over easily, and yet light enough so the child can move it when necessary. Furniture coverings in rooms which are frequented by children should be washable.

Smaller furnishings about the house, such as vases and decorative objects, should be of sufficient interest to warrant the money expended upon them, the space occupied, and the necessary care.

Valuable objects that are breakable or those that might cause injury should be placed where the small child cannot push them over or pull them down. During the time when he is learning to creep and toddle about, it may be necessary to put such non-essentials away. By such precautions many "don't" situations are avoided. Children should be permitted, however, to display, especially in their own part of the house, treasures of immediate interest to them.

In selecting books, their educational value and the pleasure they will afford are the prime considerations. But they have a decorative value as well. Open book shelves are desirable. They are accessible, attractive, and inexpensive. Books that do not meet immediate needs of children may be kept in closed cases.

Children should be encouraged to value books and to care for them. Those for the children's library should be chosen with a definite purpose. Inexpensive books may be a good investment when they fill a temporary need. A few which measure up to definite standards of beauty, durability,

and literary value will do much to build up the child's appreciation for literature and good taste in reading.

Picture books meet the child's first interests. They should be illustrative of his immediate experiences with trains, animals, cars and such things. Only simple representations of the life of other peoples and of earlier periods of history are suitable, because the concepts of time and place are outside of the understanding of young children. Illustrated alphabets and books of numbers have little place in the library of the very young. Picture books should be sufficiently well made to withstand the wear and tear of handling. For the very young child cloth books are best.

The illustrations should be simple in design, correct in proportions, and large enough to give an accurate impression of the object presented. Each picture should feature only one or two objects and represent but one or two ideas. Pictures that present too many thoughts and too much detail are confusing. Colors used in illustrations should be clear, definite, and artistically combined.

Stories should be chosen to meet the age and experience needs of the individual child. Those accompanying pictures for the very young should be simple, brief, and filled with repetition, interesting but not exciting, and with an element of realism to tie in with the child's own experience. It is better if they are concerned principally with the real happenings of his everyday life. Fairy stories and simple fanciful tales have a place in the literature of the preschool child, but they must be carefully chosen. The wonder and imaginative appeal of the unreal are a delight to him, but stories that emphasize the gruesome and contain unwholesome elements are undesirable. Legends, myths, and fables are suitable for an older period, but if they are given to the child too soon, he fails to appreciate their beauty and richness. Story books, like picture books, must measure up to definite standards of beauty and durability, and above all they must possess real literary value.

As the child grows older he enjoys stories of animal life

and of adventure and daring. There is a time, too, when both girls and boys like detective stories. It is impossible to connect definite reading interests with specific ages. The interest of the child must be considered by parents and librarians who direct his reading.

While pictures should have meaning for those who are to live with them and individual members of the family should have as much freedom as possible in selection of them, they should be in keeping with the rest of the furnishings, hung in a suitable light, and at a height where they can be enjoyed.

Pictures may mean much in the child's life, especially if he has a share in their selection and their hanging. Some of the same things that make a picture good for the illustration of a young child's book make it good to hang on the wall of his room. Clear, bright color, not too much detail, one or two large objects that are familiar to him are among the desirable characteristics of a picture. The very young child is interested in pictures of familiar animals, of life that he sees going on about him, of other children engaged in play similar to his own, of trains, boats, automobiles, and airships. Such pictures portray activities that he can understand, and so their content is rich with meaning for him. When hung low where he may look into them, touch them, and change one for another, he enjoys them as he enjoys his picture book; they become his own. Pictures of this type may well range from domestic and foreign prints, especially recommended for children, to the vivid posters of American advertising. In addition to colorful, interesting pictures that may be changed from time to time, there should be one or two pictures which will become permanent possessions, and for which the child will develop appreciation as he matures.

REQUIREMENTS FOR SPECIFIC AREAS OF THE HOUSE

Furnishings and equipment have been grouped not only according to function and considered for the house as a whole, but also in relation to its specific parts. For sim-



Courtesy of New York State College of Home Economics.

A BLACKBOARD CONVERTIBLE INTO AN ARTIST'S EASEL
PROVIDES HAPPY HOURS OF WORK AND PLAY.

plicity in presentation, the various parts of the house have been classified under the following heads:

Social and recreational area
 Sleeping and toilet area
 Service area

There is no clear-cut division between the areas. For instance, the dining-room in some respects is a part of the service area, in other respects a part of the social and recreational area. A bedroom, if used for sleeping, dressing, and play, would be a part of each of the three areas. A room serving several functions has been listed in the area in which it seems to function most fully. A statement of the specific requirements for the child through his various stages of development follows the statement of general family requirements.

SOCIAL AND RECREATIONAL AREA

This part of the house includes the living-room, ordinarily the dining-room, living porches, library, play spaces, and at times even the kitchen.

The living-room should be furnished for comfort, rest, and relaxation, and with consideration for the desires and recreational activities of each member of the family. It should be attractive, and should express spaciousness and hospitality. There should be comfortable groupings of furniture for social intercourse and for reading or study. Furnishings should include books, games, and at least one musical instrument. Living porches, the library, and other rooms used for recreational and social purposes, should express many of the qualities of the living-room, with emphasis upon the particular function of the room. The dining portion of the house should be cheerful, attractive, and convenient, with the table the center of interest at meal-time.

Special Requirements for the Child in This Area

Even though play space is provided elsewhere, the living-room should have at least one chair to fit each small child, and

a few toys and suitable books on a low shelf. By the time the child is of school age he may spend enough time in the group to justify his own place with his chair placed where the light is good for reading. He will then need more space for books. If he requires desk or table space, it should be low enough to suit his size. As children advance into elementary school and progress to junior and senior high school, they will take more part in family recreation, and there should be provision for books, games, and music to make the living-room attractive to them.

In the dining-room, special furniture and eating equipment to suit children of various sizes must be provided. A high chair with a footrest and an attached food shelf with a removable tray is needed for the baby as soon as he can sit up alone. When his bottle diet is supplemented by other foods, he also needs a straight-handled spoon with a suitable bowl, an unbreakable cup with rounded edge and well-shaped base and handle, and a dish or two with sloping sides from which he can in time feed himself without too much spilling.

During early childhood a juvenile chair with a footrest makes it possible for a child to eat in comfort at the family table, while a low table and small chair are convenient when he must eat alone. Such a table must be just high enough so that his elbows will be on a level with the top when he is sitting in a chair that fits him; that is, one which allows his feet to rest on the floor. The dishes selected for early childhood should be made of material not readily broken and shaped so that they do not easily upset. In design and color they should be appealing, but they must not be so elaborately decorated with nursery rhyme characters that they distract attention from eating. By the age of two the child needs his own small pitcher suitable in size and shape, and with handle and lip so placed that it is easy for him to pour. Silver must be chosen to fit small hands if he is to feed himself without help or unnecessary spilling. His first fork may be a salad fork with straight tines. Some of the small fork and spoon sets are also well suited for a child's hand.

By the time children reach school age their eating habits,

patterned after those of adults, should be well established, and after this period should need very little special consideration. Children of this age may still eat at a small table and use some of their own equipment, but the chair must fit the child with reference to his size and the table at which he is to use it.

It is ideal to set aside special areas for play in every home, one inside the house and another out of doors. A playroom equipped for active play and exercise and for the storage of toys tends to lessen the damage to furniture and the strain on the nerves of the older members of the family. If necessary, a part of a child's own room may be substituted for this special playroom. If no other place can be provided, some allowance must be made for play and the storage of toys in the adult social and recreational area.

Some play equipment is essential for normal child development. It needs to be neither elaborate nor expensive, nor does any child require a wide variety at any one time. In infancy, a play pen with a rattle and some spools or a few simple toys tied to the sides provides the baby with a place and materials to amuse himself without his mother's constant care. The play pen with a floor and sides that fold can be moved about and placed where the busy mother can keep an eye on the baby while she performs her household tasks. Assortments of playthings for the baby can be placed in boxes, baskets, or trays, and stored on low shelves when not in use. Clothespins, large rings, spools, light-weight blocks, large colored balls, rattles, a metal cup or pan and a spoon, and some cloth picture books, are sources of entertainment for the child long before he is a year old.

The child a little older needs toys that demand great activity in their use and provide for make-believe or imaginative play. His blocks are larger and his balls more solid than those of his babyhood days. The assortment of play equipment includes large crayons, small blunt scissors, paper, paste, and water colors. To use these to the best advantage he must have a blackboard and an artist's easel. As he gets a little older, he will enjoy a bulletin or poster board. A

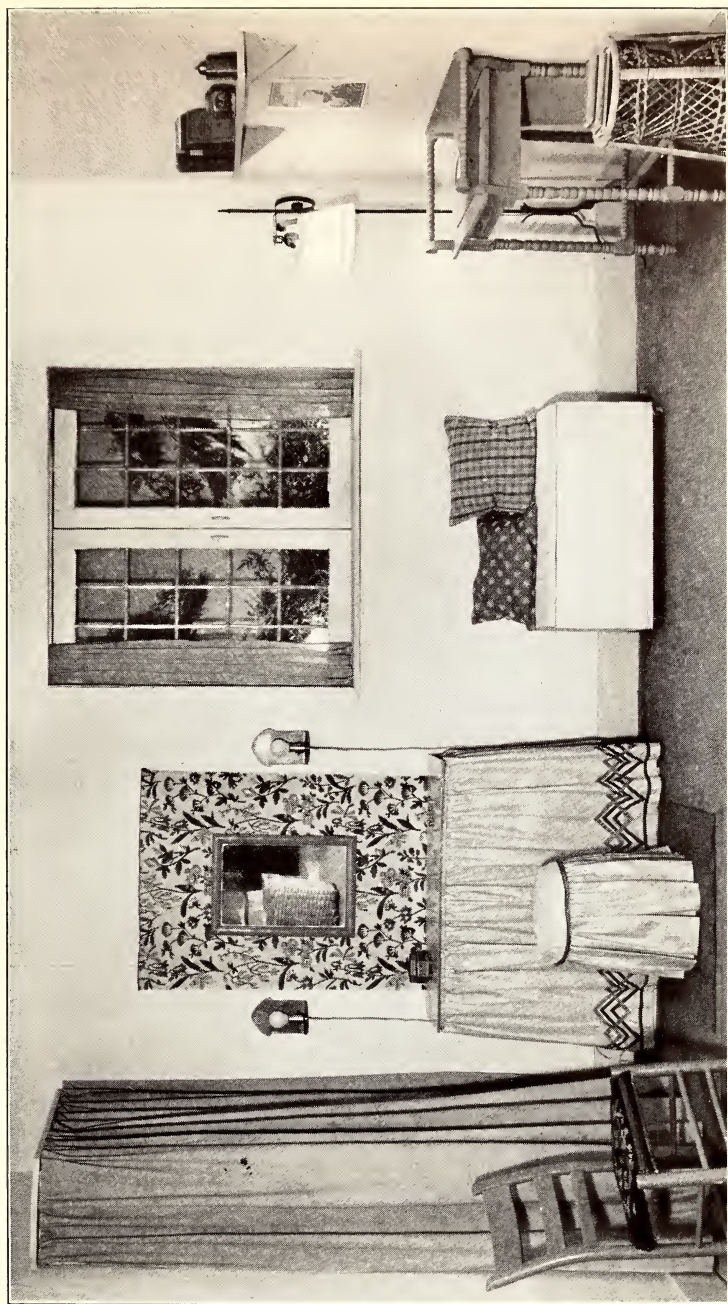
form-board with wooden insets, puzzles not too difficult to solve, and nested boxes provide amusement for long periods. There should be a suitable place for some of the traditional toys—dolls, doll bed and carriage, small mop and broom, toy train, auto truck, and a boat. He now has story as well as picture books, and he still needs a table and chairs that allow him to sit comfortably while he plays and works. Low shelves and a box or chest hold his toys and books. The child who is brought up in a house in which rooms are all on one level needs stairs to climb. A set of steps leading to a platform or balcony can be constructed in one end of the playroom or on a back porch.

The out-of-doors play space should be as large as possible, so that a sand box, packing boxes, planks, boards, a sawhorse, and a ladder can be included. Sand and sand toys, garden tools and a place to dig with them, odds and ends of wood, and a hammer and nails are needed, too, to stimulate wholesome activity that develops muscle control and manual skill. A velocipede, wagon, wheelbarrow, some kind of swing, perhaps a slide, and a place to keep pets, round out the desirable play-yard equipment for the home.

Much of the equipment bought in early childhood serves the needs and interests of the child over a period of years. As he gets a little older, he finds new uses for the playthings that he has, but will want some new toys for his constructive and creative work. Table and chairs and the things that he rides will have to be replaced as he grows. As he becomes more social he wants games and toys that he may share with his companions. During adolescence provision must be made for group as well as individual recreational activities. In this period outside groups as well as the family figure in the play life of youth.

SLEEPING AND TOILET AREA

The bedroom should express rest and quiet. Beds and mattresses should be sanitary and large enough to permit relaxation and rest. Springs should be sufficiently firm to



Courtesy of New York State College of Home Economics.

A GIRL'S ROOM FURNISHED AT A COST OF ELEVEN DOLLARS. MOST OF THE FURNITURE WAS MADE AT HOME.

avoid sagging, and the bed clothing light, warm, washable, and attractive. Beds should be so located that the occupant has sufficient fresh air and if possible so that they may be reached from either side. Furniture should be arranged to provide ample space for comfort and ease in dressing. Bedroom closets must have adequate open and enclosed storage space for each individual, sufficient natural or artificial light to permit one to see comfortably into all parts, and to afford convenient access to every article frequently used.

Bathroom walls and floors should be of a finish easily cared for, all equipment simple in design and likewise easily cleaned. Storage space, preferably built-in, should be provided for toilet requisites. The medicine cabinet must be out of the reach of the small child and any special heating equipment should be safely guarded.

Special Requirements for the Child in This Area

Simplicity and sanitation should be the keynotes in planning children's rooms. Floors and their coverings, walls, woodwork, furniture, and curtains should be washable. For decoration a few carefully chosen pictures which can be changed frequently are preferable to the elaborate nursery-rhyme friezes and wallpapers often shown for the rooms of very young children. The latter are undesirable not only from the standpoint of art, but because they tend to distract the attention of the child during the period when he should be taking his naps.

Unless the child has a special playroom, his bedroom should be arranged with a place to keep toys, and with plenty of free space for play. Small rugs desirable for him to sit on while playing on the floor can be easily put aside when he wants to be more active.

When the child's bedroom serves only as a sleeping room, it should include at least a bed suitable in size and type, adequate drawer and shelf space for keeping his clothes in good order, a chair or two of the right size, and a table or desk. The baby's crib should be large enough for him to move

about in and to sleep comfortably; it should have a good mattress and springs firm enough not to curve with the weight of the body. Some pediatricians recommend neither springs nor pillow during infancy and very early childhood, when the bones are growing firm. For safety, the crib should have sides. Bedding includes sheets, rubber sheeting, quilted pads, and light, warm covers that are long and wide enough to tuck in well. A suitable carriage or a large basket equipped as a bed, or both, will serve for the baby's out-of-door sleeping and as his traveling vehicles. He may have such extra furniture as a canvas dressing tray and a rack for drying clothes.

As soon as the child outgrows his crib he may well have furniture that will be suitable until he is grown. A low three-quarter-size bed that he can climb into easily or a slightly higher one with steps or a stool to help him up, may be selected. Some of the furniture shown for children of intermediate ages is artistic in design as well as suitable in size for the period of early childhood and on throughout adolescence.

To encourage self-help, the child's clothes and other belongings must be placed within easy reach, in drawers that slide well and are fitted with handles that can be grasped easily, and in closets with low hooks. The lower drawers of a dresser of full size may serve. However, well-proportioned small chests bought for children's clothes are handy later for adult use.

For the older years a desk or study table and a straight chair, and a comfortable lounging chair of suitable size are recommended.

The bathroom needs of each child should be considered. Even the smallest members of the family should have a low towel rod, a hook for wash-cloth, and very early in life a toothbrush hook also. The baby may have his special bathtub, and perhaps a table for this tub and those accessories used during the bath. His needs include also a tray or basket for the soap and bath equipment. Until he is strong enough to sit up the baby should have a very small chamber

on which he can be supported in his mother's lap. When he begins to sit up, he should have a nursery chair, or a seat equipped with sides and a back that fit securely to the adult toilet. By the time he is walking, steps or a stool should be provided to help him reach wash bowl and toilet seat without help. During the rest of his growth period his only special needs are lower hooks within his reach, or steps to reach these if they are placed too high for him to reach otherwise.

SERVICE AREA

The service area includes the food preparation area, laundry, service porch, storage space, and all other parts of the house contributing to the family's material needs.

The kitchen should be cheerful and compact with walls and floors that are smooth, impervious to water, and easily cared for. Floors should be resilient. As much of the equipment as possible should be built in, and both equipment and furnishings should be selected for efficiency, durability, adaptability, and ease in cleaning. While mechanical equipment is selected on the basis of efficiency, individual aptitudes, likes, and dislikes, the amount of money expended, and the space occupied when not in use should be duly considered. Surfaces of equipment and utensils should be as smooth as possible for ease in cleaning. Equipment and utensils should be grouped into working centers following the order of work, with all working surfaces adjusted to the height of the worker. Utensils most frequently used should be kept close at hand. Ample storage space conveniently located and shelves of suitable depth are desirable. In addition, a planning desk for keeping bills and recipes, and a rest center with a comfortable chair are useful.

In the laundry and other service areas, as well as in the kitchen, efficiency, durability, and comfort are the determining factors in the arrangement of furnishings and equipment. Storage space should be ample, suitable, and well lighted.

Special Requirements for the Child in This Area. In the kitchen, special equipment and a definite place to keep it

must be provided for the preparation of the infant's food and for sterilizing bottles and nipples. A metal grip for removing sterilized utensils from the boiling bath, a special bowl, pitcher or other container for mixing the formula for the baby if he is artificially fed, measuring spoons and cup and a graduated measure, a funnel, sieves of varying coarseness, a food grinder, and a double-boiler, are essential in the latter part of the period of infancy. Some of this equipment is needed as long as the specialist recommends special preparation of the child's food.

The family wrap closet and all other general storage places should be provided with low shelves and hooks to meet the needs of each child. A well-arranged closet is one means of lessening the scurry of collecting galoshes and gloves in getting off to school.

Before the child is of school age he can work in the kitchen helping with certain tasks, if a small table or some other low working space is provided for him, or if a box or steps are available to raise him to adult working levels. He should be allowed every opportunity to help because of the value to his development—sometimes physical, sometimes mental, sometimes social, and sometimes all three. The range of things he can do increases with his years, but to him the value of doing these things is never greater than in very early childhood when he needs to learn motor control and to feel his importance through the help he gives.

RECOMMENDATIONS

SUGGESTED SURVEYS AND RESEARCH

Selection, arrangement, and use of house furnishings and equipment in relation to the needs of children should be taught in elementary and secondary schools. There has been a general failure to recognize the fact that knowledge, experience, and imagination in these fields are necessary for success.

Educational home-making centers free from the influence of commercialism, where the home-maker may study the



Courtesy of New York State College of Home Economics.

A GARDEN SPOT OF HIS OWN AND TOOLS TO DIG WITH.

furnishings and equipment desirable for child needs, should be organized. Frequently the home-maker has only the salesman or advertising matter to guide her in selection.

Studies should be made of possible lines of cooperation between manufacturer, distributor, architect, educator, and consumer in the field of home furnishings and equipment in relation to the needs of children.

Present publications on the selection of furnishings and equipment for children should be popularized.

Publications on selection, arrangement, and use of household furnishings and equipment should be evaluated by means of an annotated bibliography.

Surveys should be made of homes at various income levels, with emphasis on furnishings and equipment in relation to child needs.

Studies are needed to determine the extent to which the use of household equipment contributes to child development at various age levels, and to determine abilities and interests of the child, at various levels of development, in furnishings.

Studies should be made on the reaction of children to line and color.

An outline should be made for a home safety program, to be followed by periodical and careful inspection.

A study should be made of mattresses from the standpoint of health and sanitation, this to be followed up by recommendations for adequate State legislation.

A study should be made of sizes of beds, with relation to position of the occupant, for relaxation and comfort.

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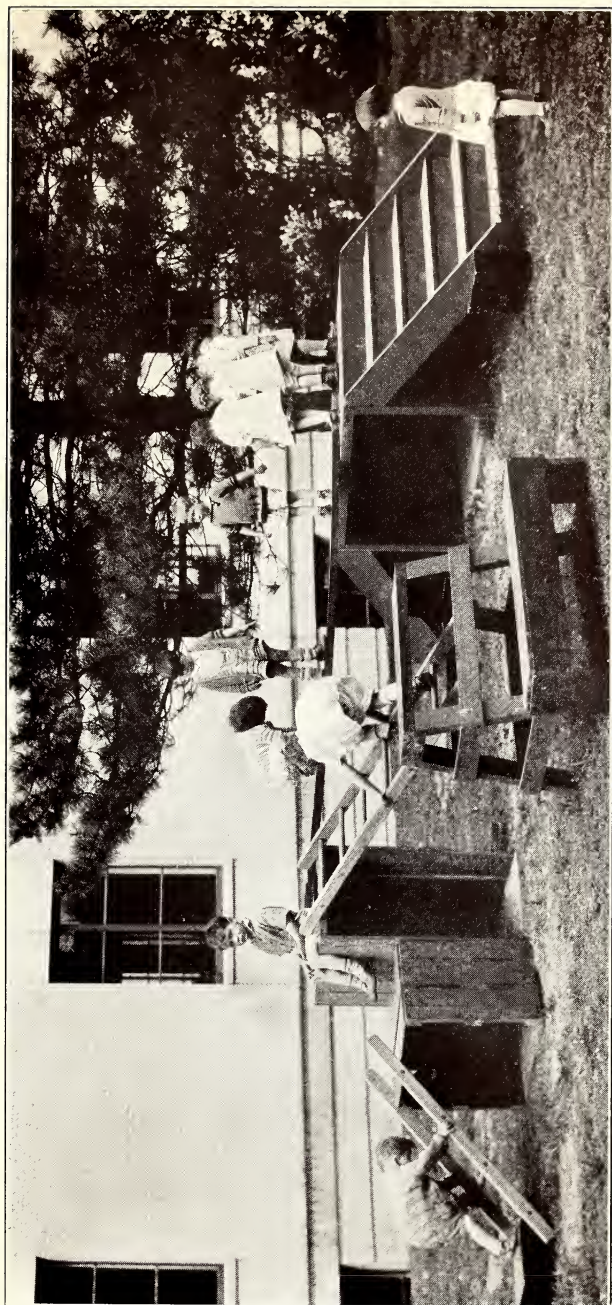
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Courtesy of New York State College of Home Economics.

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MANAGEMENT OF HOME ACTIVITIES

MANAGEMENT OF HOME ACTIVITIES

GENERALLY speaking, homes may be classified as well, fairly well, or badly managed. The factors that determine the management of a home are the abilities, the standards, and the methods of the home-makers; and the type of management of a home is in turn responsible in no small measure for the development—physical, mental, intellectual, and spiritual—of the children.

The method of management is a determining factor in the extent to which the activities and processes that take place in the home serve to develop desirable characteristics. In one home the mother begins to train her children at a very early age in habits of independence and self-reliance by teaching them to attend regularly to their own personal needs. In another, on the other hand, the parent assumes the rôle of personal servant to her children, continuing to take the responsibility of giving baths, supervising diet at meal times, and laying out the garments to be worn, from infancy on through adolescence.

The method of management also determines in some measure the degree to which the activities of the home may serve to develop manual skills. In some families children are required to assist in daily household tasks. These tasks, when properly supervised with due recognition of improvement, serve as a means of education. In other families where no participation in the work of the home is demanded, children are often found to be lacking, not only in manual skills, but in appreciation of the service necessary to keep the household machinery running smoothly and well.

Again, the efficiency and skill of the home-maker in performing routine tasks determines, in part, the degree of freedom from overwork, fatigue, and worry, which affects not only those who do the bulk of the housework, but also

the other members of the family. And the extent to which she analyzes and places emphasis upon the needs of the members of the family group rather than on planning merely in terms of household tasks to be performed, is no less important than skill of performance in determining the amount of time, energy, enthusiasm, and interest available for both parents to devote to the care and development of their children.

The standards of living set by a family and the methods used to attain them affect the physical health of both children and adults. The amount of illness with which the family must contend, the degree of friction between its members, and their power to relax and recuperate in the home environment depend, at least to some extent, upon the living standards of the parents.

From the standpoint of the child, then, the abilities, standards, and the methods of the parents, play a large part in determining the type and amount of education which he will receive in the family, not alone in matters of health, character training, and manual skills, but also in appreciations, in the use of leisure time, and in the ability to live harmoniously with others.

One returns to the fact that the home remains in its old seclusion. Very little is known about the different types of home and of family life that exist throughout the United States at the present time. It is necessary to have more facts about homes in their relation to the development of children if there are to be leaders to help overcome existing weaknesses.

FACTORS INFLUENCING HOME MANAGEMENT

The nature and number of household activities carried on in present day homes appear to vary with the size of the income, the number in the family, the abilities and interests of the wife, the attitude of the husband and the position which he holds in the family, and finally, with the location of the home. If satisfactory paid service or commercial agencies can be secured at a cost that is not prohibitive for

the family, services which were once a part of the wife's work are more likely to be delegated now than formerly. There are less frequent objections to this on the ground that the transfer will result in the disintegration of the home.

LOCATION OF THE HOME

Rural families are more largely producing units than urban. The wide variation that exists between the activities of farm women and those of women living in a small city is shown in the following studies:

1. Excerpts from *Routine and Seasonal Work of Nebraska Farm Women*^{1*} give an indication of the activities of women living on the farm:

"The most important routine work of the farm woman is care of her home and family. The size of the household changed somewhat during the year, from 4.2 persons in October to 4.7 persons in June. Only in October were the average family and the average household the same size. The number of rooms used changed slightly during the year. During the spring and summer months a larger number of rooms were used in the household than during the fall and winter.

"Laundering was a part of the routine work of the group included in this study: 98 per cent of the women did all the laundering, while 2 per cent did a portion of it.

"Some sewing was done at all seasons of the year. More garments were made for women than for children. In April and November the largest number of children's garments were made, while the largest number of women's dresses were made in May. Sewing for the house itself was heaviest in winter months.

"Baking bread, cake, and cookies was a routine task for a number of the women: 42 per cent of the women on the farm baked all their bread; 50 per cent baked a portion; 8 per cent baked none; 94 per cent baked all the cake used in the family; 6 per cent baked a portion; 63 per cent baked all the cookies used; 34 per cent baked a portion; 3 per cent baked none.

"Care of milk and cream and making of butter continued with some fluctuations throughout the year. More women made more butter during the winter and spring than during the summer and fall. The average amount of butter made each month was largest in May and smallest in October. The average number of gallons of milk cared for daily was also greatest in May.

* Numbers refer to literature cited at close of this chapter.

"Canning of fruits and vegetables is a strictly seasonal task. The canning of fruits spreads over a slightly longer time than the canning of vegetables. June, July, August, and September were the busiest fruit-canning months. Canning of vegetables started later and reached its peak in August and September."

Care of poultry is more or less a seasonal task.

"During April, May, and June, when baby chicks are hatched or purchased, the average number of chickens more than trebled the number at the beginning of the year. During July, August, and September the largest sales of chickens took place. Eighty-two per cent of the group took all the care of the poultry.

"Gardening is one of the most purely seasonal occupations of the farm home-maker. The largest number of women reported work in the garden in April, May, June, and July. In the group studied: 16 per cent took entire care of the garden; 64 per cent received help; 20 per cent did no gardening; 35 per cent of the total number helped with other outside work of the farm; 44 per cent of the women helped with the milking. This was a task performed by most women only in emergencies."

The outside tasks ranged from frequent trips to town for repair parts to the heaviest type of field work. A few women reported these tasks as a part of their routine work, but in most cases such work was only occasional.

2. Excerpts from *Middletown*^{2*} give an indication of the household activities of women in a midwestern city at the present time and those of thirty years ago:

"The single household in Middletown today, as in 1890, is the unit for both the preparation and the eating of food. 'Mealtime' serves a double function—nutrition and social intercourse. The day-by-day social life of the individual family as a group centers around mealtimes, and to a considerably less extent, the family automobile.

"Morning, noon, and evening meals eaten within the home are still the rule. A brisk skirmish is on, however, for possession of the noon meal. On the one hand, the diffusion of the ownership of automobiles is facilitating the husband's coming home to lunch despite the growing size of the city and the increasing remoteness of homes from places of work; while on the other, high school cafeteria, a factory cafeteria

* From *Middletown*, by Robert S. and Helen Merrell Lynd, copyright, 1929, by Harcourt, Brace and Company, Inc.

in at least one large plant, and business men's luncheon clubs are drawing many away from home.

"Despite the fact that children in Middletown place 'being a good cook and housekeeper' foremost among the qualities desirable in a mother, cooking occupies a less important place today than formerly among both groups, but especially among the business class. The preparation of food in the nineties was one of the woman's chief glories. Luncheon and dinner clubs meeting in the homes were favorite social events. Referring to one of these clubs at which each hostess in turn strove to surpass the other members with a new dish, the local press explained, 'The ladies will resume the giving of those fine suppers which so pleased their husbands last winter.' Not only have social clubs, built around cooking, greatly declined, but the trend is away from the earlier attention to elaborate food. According to a local butcher:

'The modern housewife has lost the art of cooking. She buys a cut of meat that is easily and quickly cooked, whereas in the nineties her mother bought big chunks of meat and used them in various ways. Folks today want to eat and get out in the car.'

"The abbreviated time spent today in preparation of food is reflected in such things as the increased use of baker's bread and the corresponding decrease in home baking: 81 of the 119 working-class wives who answered the question, and 34 of the 39 business-class wives spend no time today baking bread and rolls; as against 3 of the mothers of the former, and 16 of the mothers of the latter.

"According to the head of the leading Middletown bakery, not over 25 per cent of the bread eaten in the city was commercially baked in 1890, while today 55 per cent to 70 per cent of the total annual consumption, varying with the season, is baked by commercial bakers.

"Increased use of commercially canned goods has meant not only less time spent in home canning but a marked spread in the variety and healthfulness of the diet of medium and low-income families throughout the bulk of the year when fresh garden products are expensive. As one housewife expresses it, 'You just spent your summer canning in 1890, but canned goods you buy today are so good that it isn't worth your while to do so much.' Well-to-do families do least canning since they can afford to buy the better grades of canned goods, but tomatoes and fruits, particularly jellies, are still 'put up' in quantities by housewives, notably those of the medium and smaller-income groups. A prejudice lingers among these latter against feeding one's family out of cans. One of the federated women's clubs recently gave over a program to a debate of the question: 'Shall a Conscientious Housewife Use Canned Foods?' " ^{2a}

The amount of sewing done by Middletown wives indicates another shift in household activities:

"Twenty-five of the 112 wives of working men for whom data were secured, and 20 of the 39 wives of the business class spend not over two hours a week on all sewing for themselves, their husbands, and their children, against estimates of 4 out of 65, and 11 out of 35 respectively for their mothers. Seventy-two of the working-class women, and 29 of the business-class wives today spend not over six hours. Of this sewing that continues to be done in the home, the greater part is concentrated today on the clothing of the female members of the family and of the small children. Ninety-two of the 112 working-class wives do no sewing except current mending for their husbands, as against 38 of their mothers for whom estimates were made by them, while 35 of the 39 business-class wives do no sewing for their husbands today, as against 29 of their mothers.

"According to the leading men's and boys' outfitter, virtually none of the boys' winter suits worn in Middletown today are home-made, whereas he estimated that about half of them were made in the home in 1890."³

3. The effect of the resources of the community upon the activities to be retained in the home is suggested in another study:

"The resources of the community are another determining factor. Where good commercial laundries are established and reasonable prices are charged there is a tendency to send a part or all the laundry out.

"If dressmakers are available or ready-to-wear purchases can be made readily, cheaply, and satisfactorily, less sewing is likely to be done by the mother.

"Gardening is in part a method of insuring a less costly diet and one that is adequate.

"When public markets can be depended upon for a supply of fresh fruits and vegetables, the space for a vegetable garden is used for flowers, unless growing vegetables is a hobby of some member of the family.

"Among the agencies in the community which lighten the work of the home the bakery outnumbers all others. That baking bread is in the process of becoming a lost art seems probable when one out of two finds buying bread more to her liking. The number who depend upon the bakery for pastries, on the contrary, is negligible.

"The degree to which commercially canned goods are purchased is not entirely clear but at least 10 per cent do very little or no home canning.

"Somewhat less than one-fourth of the women use commercial laundries in order to reduce the fatigue that results from a 'blue Monday,' and it is in the smaller families that this practice is the more common. In a few cases ironing is referred to specifically as being done outside of the home.

"Less than two out of ten patronize dry cleaners, according to the replies, but it is probable that failure to mention this service rather than failure to use it is responsible for the small proportion.

"Ten per cent depend almost entirely upon ready-to-wear clothing while the rest make, mend, and remodel. For the most part those who make nothing have the larger incomes, although in a few instances it is a lack of 'knack' in sewing that accounts for the policy." ⁴

4. In a Kentucky study ⁵ of a selected group of 963 mothers the frequency of performance of the following activities is thus reported:

	<i>Regularly, Per cent</i>	<i>Occasion- ally, Per cent</i>	<i>Never, Per cent</i>
Food preparation:			
Preserves, and so forth.....	95	4	1
Canned fruits.....	93	6	1
Pies.....	92	8	..
Cakes.....	91	9	..
Bread.....	90	10	..
Butter made at home.....	55	5	40
Meat and lard at home.....	53	11	36
Dry cleaning.....	43	45	12

"There is a wide variation in the amount of dressmaking that is done in the homes, varying from 3 per cent who make children's coats to 98 per cent who make housedresses."

"Five per cent have a cook regularly. An additional 10 per cent have one occasionally."

EQUIPMENT USED

The wide range in the number of activities carried on in the home, which is shown in the studies quoted, recurs also in the kinds of equipment found. Here again location of family is significant—the rural family is frequently at a disadvantage in attempting to shorten the hours required for housekeeping and to maintain desired standards. Not only are many homes less convenient, for they must be taken with

the farms regardless of how incompletely they meet the needs of the group, but they lack the improvements which are within the reach of the urban, suburban, and village home.

1. The effect of having a house in which there is no running water is seen in the following figures:

"In 79, or 28.3 per cent of the households studied, the farm home-maker carried all of the water used in the household; in 155, or 55.3 per cent she helped carry water; in 46, or 16.4 per cent she had no part in this task; in 4.5 per cent the children carried all of the water. No relationship was found between the person carrying water and the number of persons in the household.

"Very few of these homes had modern conveniences: 13 per cent of the homes had bathtubs; 1.7 per cent had chemical toilets; 80 per cent had cream separators; 77 per cent had washing machines.

"Cream separators create a demand for water peculiar to the farm home. Home laundering also demands a considerable amount of water. In 98 per cent of households all the family laundry was done in the home.

"Distance covered in carrying water, on the average, was: 75.7 feet for general household purposes; 62.6 feet for laundering; 4311.5 feet traveled each week in carrying water; 3.5 miles each month; 42 miles each year."

The time consumed in carrying water was on the average. This time does not include that spent in putting on and taking off wraps in winter months:

2 hours 20 minutes each week for household purposes;
46 minutes each week for laundry water, making
a total of
3 hours 6 minutes each week,
13 hours 31 minutes each month,
162 hours 4 minutes each year.

Time spent in removal of waste water:

"In 66 per cent of the households waste water was taken from household in pails; in 50 per cent was emptied less than twenty feet from the kitchen; in 16 per cent waste water stood on the ground after being emptied.

"Waste water was emptied further from wells and cisterns than from kitchens.

"The daily consumption of water for each member of the family

averaged twenty-five gallons in a modern house with bath and flush toilet. From eight to twenty gallons are needed to maintain sanitary conditions in homes without bathroom or flush toilet.

"This discrepancy between the average of twenty-five gallons a day for each person in a modern home and that of 5.9 gallons each day in the farm households of this group indicates very clearly the tremendous disadvantage under which the farm home-maker must work when she has neither a pump nor running water in the house. It indicates just as clearly less comfortable living conditions than in homes equipped with running water and bathing and indoor flush toilet equipment.⁶

2. The effect of electricity which is within reach is indicated in the homes of *Middletown*:

"Most important among the various factors affecting women's work is the increased use of labor-saving devices. Just as the advent of the Owens' machine in one of Middletown's largest plants has unseated a glass-blowing process that has come down largely unchanged from the days of the early Egyptians, so in the homes of Middletown certain primitive hand skills have been shifted overnight to modern machines. The oil lamp, the gas flare, the broom, the pump, the water bucket, the washboard, the flat-iron, the cook-stove, all only slightly modified forms of some man's most primitive tools, dominated Middletown housework in the nineties. In 1924, as noted above, all but 1 per cent of Middletown's houses were wired for electricity. There was 25 per cent increase in K.W.H. of current used by each local family between March 1920 and February 1924.

"Electric equipment bought in Middletown from May first to October thirty-first, 1930, included:

1,173	curlers
1,114	irons
709	vacuum cleaners
463	toasters
371	washing machines
114	electric heaters
18	heating pads
11	electric refrigerators
3	electric ranges
1	electric ironer.

It is estimated that 90 per cent of the homes in Middletown have electric irons.⁷ *

* From *Middletown*, by Robert S. and Helen Merrell Lynd, copyright, 1929, by Harcourt, Brace and Company, Inc.

3. The use of modern equipment in the home affects the opportunities for assistance from children. The following statement, summarized from the comments of 355 mothers, indicates their attitude toward the use of electrical appliances and other time- or labor-saving equipment.

"The effect of modern labor-saving equipment upon the opportunities for teaching and training the children is on the whole desirable in the opinion of practically half of the group. Not only is time saved and enthusiasm reserved for companionship with them through its use, but this equipment enables mothers to have help that the children would not be able to give without it. The example of the vacuum cleaner is the one most frequently mentioned. Inasmuch as the children will be living in a generation when these and many other devices will be an accepted part of their environment the need of teaching the use and care of them seems important. Furthermore, there are those who find that there are many processes in the home which must be done by the hand method, hence the combined training can be given. Bedmaking, dishwashing, setting and clearing the table, dusting, and preparation of food give opportunities for tasks done without mechanical aids. The importance of teaching the child the value of time and the wisdom of making the best possible use of it is another reason suggested for having him know how to use modern equipment. The following comment is fairly representative of the opinions expressed:

'As civilization advances more mental activity and less physical labor are taking place in the home. I should prefer less knowledge in beating rugs and more in literature, music, art, and business for my children. Housekeeping is merely a means, not an end. It should be made as short and easy as possible, the end being the fullest enjoyment of life. This is the picture—the household merely the background or setting of the stage.'"⁸

4. The relative importance of different pieces of equipment for this group of women with children is brought out in the following excerpts:

"The slogan 'Let machinery do the work while you read' has been adopted by the fraternity of mothers as a very effective means of releasing time and energy for other things, and wherever possible new tools or machines have been purchased. The quantity of equipment that is to be found in these homes is evidence of the ability of advertisers and salesmen to convince the prospective buyer of the efficiency of their wares and the need for them. Almost three-fourths of the women consider the cost and the amount of time saved as the most

important factors in deciding what they will buy. The amount of effort expended is considered by two-thirds of the group. The quality of the result secured is less frequently a major factor and is reported in less than one-half of the replies. Likes, dislikes, and aptitudes are considered in 15 per cent of the families. The amount of available space is an additional consideration which must be thought of if the housing verges on inadequacy.

"Electricity has been a boon to the home-maker, for it has not only taken much of the drudgery out of routine tasks, but it has also made possible a higher standard of efficiency, comfort, and cooperation. A vacuum cleaner tops the list of generally accepted conveniences, with a washing machine appearing as a close second. Both are mentioned by six out of ten women. An electric iron—preferably one in the laundry and another on the second floor—is the recommendation of one woman; and an electric motor for the sewing machine completes the list of the four devices most frequently mentioned. An ironer, an electric range, a toaster, a refrigerator, a waffle iron, a percolator, a cooker, an electric plate, and miscellaneous appliances also appear as exceedingly desirable, though they are evidently far less universally found than the first.

"Gas has also enabled the woman in the home to have a pleasanter round of duties. The gas range is regarded as particularly desirable and doubly so if it is equipped with a good oven regulator which makes baking fool-proof. If it has a fireless cooker device it has even greater advantages. A gas water heater, or some other type of an automatic heater makes the problem of having sufficient hot water the year round a simple one.

"Among the utensils which are mentioned most frequently a dish drainer to eliminate the drying of dishes comes first. A plentiful supply of well chosen mops and brushes with a duplicate set for the second floor reduces the time and burden of keeping the house presentable. A weighted waxer—hand or electric—helps greatly in keeping the floors in good condition, and a carpet sweeper is handy for daily use. Pressure cookers, fireless cookers, and waterless cooking sets all come in for a share of praise in making the working day shorter and less strenuous. A tea cart is useful, as are adequate cooking utensils. In two homes bread mixers are recommended."⁹

5. The outstanding needs of farm women which were revealed by an earlier study of 10,044 homes in different sections of the country were:

- a. To shorten the working day of the average farm woman (the average for the summer is 13.1 hours and for the winter 11.5 hours);
- b. To lessen the amount of heavy manual work;

c. To bring about higher standards of comfort and beauty for the farm home;

d. To safeguard the health of the farm family and especially the health of the mother and growing child;

e. To develop and introduce money-yielding home industries where necessary in order to make needed home improvements.¹⁰

The author of this report states her belief that the introduction of improved equipment and labor-saving devices, the use of better methods of work, the application of the laws of hygiene will do much toward changing the present status of the activities of the farm home. An extensive study is needed before it is possible to determine how many of the needs listed have been met in the last decade.

TIME SPENT

In the main the shift in household activities appears to be one of kind rather than one of hours. While there are those who indicate the deplorable results occasioned by the unwise use of the new leisure, the evidence of a shortened day for mothers, particularly for those whose children are young, is yet to be produced.

The most extensive study of the use of time by the homemakers which has been made summarizes its findings in the following paragraph ¹¹:

"In a study recently made by the Bureau of Home Economics, of the work of over one thousand housewives more than one-half spent 48 hours a week at their home-making; one-third spent over 56 hours a week.

"Most of these records, to be sure, came from rural homes, but the figures of the town and city housewives varied amazingly little from those of the farm women. One thousand records, of course, is only a very small sample of the housewives of the nation. But it is sufficient to dispose of the notion that the chief problem of these millions of workers is in finding some use for their excess leisure."

This study shows also the relative amount of time spent in the different activities:

"The average time spent for all work by 950 farm women was 62 hours each week, or almost 9 hours each day of the week.

"The most surprising results of the study appear with the city home-makers. It is they who are supposed to be wasting their time away in idleness. Yet the average time spent in home-making by the women was 51 hours a week in cities of 2,500 to 50,000, and 48 hours a week in cities of 50,000 and over.

"Even this difference is more than offset by the slightly smaller number of persons in the average city household, 4.1 persons as against 4.4 in the average farm home, and by the slightly larger amount of help which the city housewives received. Only 10 per cent of the women in large cities spent less than thirty-five hours a week in their home-making and there are few of us enjoying full-time professional jobs who would feel distressingly idle on thirty-five hours of work.

"The similarity of the urban and rural records holds even in the distribution of the total time among the various household tasks. The city home-makers, to be sure, spent a few more hours during the week in care of children and purchasing, and a few hours less on cooking and dishwashing. But this smaller amount of time spent in the kitchen is mainly due to the larger number of meals eaten away from home by members of city families. For the other routine tasks the figures are almost identical—about:

7½ hours a week, on the average, for cleaning;
 5¼ hours a week, on the average, for laundering;
 1½ hours a week, on the average, for mending;
 4½ hours a week, on the average, for sewing."¹²

These findings, based upon careful records kept by more than two thousand bona fide home-makers over a period of one week, present the situation as it exists today.¹³

The number of hours that continue to be spent in housework leads one to wonder whether the saving of work in one direction is not offset by a complication of life in another, with the result that wives and mothers who do their own work continue to be busy all day long in the performance of household tasks.

ENERGY USED

The clock records units of time required to do various household tasks, but no satisfactory mechanism has yet been devised to measure the amount of energy expended in their performance. The pedometer can be used to discover the number of miles the worker walks during a given day, but this distance cannot be accepted as an index of the energy

used. Laboratory tests comparing the energy-saving value of different types of equipment are illuminating.

1. By the method of indirect calorimetry the following results have been secured: Fifty-six per cent above the resting energy expenditure is required to clean with an electric cleaner; 138 per cent above the resting energy expenditure is required to clean with a carpet sweeper; 326 per cent above the resting energy expenditure is required to clean with a broom.¹⁴

In the absence of more data of this type one turns to the activities which women say they find most fatiguing, realizing that in such statements factors other than actual energy required will enter.

2. A study of 306 mothers affords the following clue to what are considered tiring activities in home-making:

"Among the several activities which cause fatigue the daily and weekly cleaning is reported most frequently. Laundering is second in this group, and ironing seems to give more trouble than washing, though both are problems. The physical care of young children, including the bathing, lifting, dressing, and feeding, is another source of fatigue, and constant responsibility for them overtaxes nine out of ten mothers in the group. A smaller number find seasonal cleaning, the manifold duties of a home, food preparation, and keeping the house in order the reason for weariness and a lack of enthusiasm. Getting the sewing done and keeping holes darned and buttons on is less often a cause of fatigue than one of worry because these tasks are so likely to be postponed indefinitely or until they cannot be held over longer because of the urgent need for them."¹⁵

ASSISTANCE OF ADULTS IN WORK OF THE HOME

Assistance may be secured by women in their homes by calling upon relatives or upon members of the immediate family. It may be given also by paid workers either in the home or outside of it, and by agencies which have been developed either cooperatively or commercially to perform services for the family. Usually the relatives are to be had without pay, while the employment of those beyond the kinship group results in less of the income to be devoted to other needs.

1. Information regarding the number of families in the United States who have one or more maids is lacking, but there does seem to be a trend in the direction of more hourly service when workers are used in the home, and an increase in the patronage of commercial agencies. In *Middletown* one sees this tendency and notes the reasons that are given for it.

"The fact that the difference between the women of the business group and their mothers is less marked than that between the working-class women and their mothers is traceable in part to a decrease in the amount of paid help in the homes of the business class. It is apparently about half as frequent for Middletown housewives to hire full-time servant girls to do their housework today as in 1890. The thirty-nine wives of the business group answering on this point reported almost precisely half as many full-time servants as their mothers in 1890, and this ratio is supported by federal census figures.

"Thirteen of the 39 business wives have full-time servants; 2 of them more than one; 1 of them the equivalent of one or more days' help each week; 4 of them no help at all.

"But even if the women of the business class have fewer servants than their mothers, they are still markedly more served than the working class. One hundred and twelve of the 118 working-class women had no paid help at all during the year preceding the interview; 25 of them had the equivalent of one or more days' service each week.

"Both groups of housewives have been affected by the reduction in the number of 'old maid' sisters and daughters performing the same duties as domestic servants but without receiving a fixed compensation. Prominent among the factors involved in this diminution of full-time servants are the increased opportunities for women to get a living in other kinds of work; the greater cost of a 'hired girl'—ten to fifteen dollars a week as against three dollars in 1890; and increased attention to child-rearing, making mothers more careful about the kind of servants they employ. 'Everyone has the same problem today,' said one thoughtful mother. 'It is easy to get good girls by the hour but very difficult to get any one who is good to stay all the time. Then, too, the best type of girl with whom I feel safe to leave the children, wants to eat with the family.' The result is a fortification of the tendency to spend time on the children and transfer other things to service agencies outside the home. A common substitute for a full-time servant today is the woman who 'comes in' one or two days a week. A single day's labor of this sort today costs approximately what the housewife's mother paid for a week's work."¹⁶ *

* From *Middletown*, by Robert S. and Helen Merrell Lynd, copyright, 1929, by Harcourt, Brace and Company, Inc.

2. The difficulty of securing satisfactory helpers in the home has been brought out in a *Study of the Needs of Smith College Alumnae*:

"Early in the Institute's program, questionnaires were sent to all the Smith College alumnae who were known to be coordinating in any degree, that is, carrying on domestic and intellectual interests simultaneously. The questionnaires asked in detail how the home duties were managed and time budgeted and invited free discussion and suggestions as to what would be the greatest aids. Some sixty-six per cent stressed, above all else, a need for household assistants. Many emphasized the desirability of a special type—not necessarily expert in technique, but with character and reliability. Repeatedly the remark was made, 'If our helpers have character we can develop technique!'" ¹⁷

3. The trend appears to be in the direction of less full-time paid service employed in present-day homes. According to the United States census, the ratio of servants, waiters, housekeepers, and stewards was:

25.9 to 1000 of population in 1870;
22.4 to 1000 of population in 1910;
17.3 to 1000 of population in 1920.

The following figures and interpretation taken from a study ¹⁸ of women in gainful occupations is significant in this connection:

"In 1870, 60.7 per cent (873,738) of the women engaged in non-agricultural pursuits were servants or had taken up similar employment. This percentage declined at each successive census and in 1920 18.2 per cent (1,358,665) was reached, marking the change of half a century from the time when the occupation of servants constituted the principal opportunity for women seeking to earn a living, to the present time when less than one-fifth of the wage-earning women outside of agriculture are servants.

"The decrease between 1910 and 1920 in the number of women employed as servants (using this term in the more limited classification of the past two censuses), while general throughout the United States was much more marked in the Northern than in the Southern and Western States. . . .

"The check to immigration during the latter half of the decade 1910 to 1920, of course, reduced the supply of the foreign-born available for employment as servants. But if this had been the only, or

even the principal factor influencing the situation, it would seem that there would have been no decrease in the other nativity groups, but rather an increase, to make good the deficiency in the supply of foreign-born servants. But, as a matter of fact, the number of native white servants likewise decreased, although the percentage of decrease was not so great as it was for foreign-born. The number of Negro women servants, it is true, showed no decrease, but it did not appreciably increase, remaining practically stationary. There was, however, as noted elsewhere, a very considerable increase of Negro servants in the Northern States, where to some extent the Negro woman seems to have taken the place of the immigrant in the field of domestic service.

"The increase in servants' wages, accompanying a general increase in the cost of living, makes the keeping of a servant more and more in the nature of a luxury which only people with liberal incomes can afford. On the other hand, it might seem that this increase in wages, by making the position of servants more attractive, should have induced more women to seek that employment; but it has apparently not had that effect, partly, because wages have increased also in other competing employments for women. Housekeepers very generally complain of the increasing difficulty experienced in obtaining and retaining servants even at high wages.

"Another factor which may be both a cause and a result of the decrease in the number of servants is to be found in the simplification of housekeeping resulting from use of apartments, resorting to cafés and restaurants for meals, invention of mechanical improvements in housekeeping—such as electrical ranges, vacuum cleaners, and washing machines—and opportunities for having laundry work, cooking (to some extent), and many other tasks which were formerly included in housework, done outside the home.

"Servants are not so indispensable in housekeeping as they once were, and people are finding or inventing ways of doing without them. Of course only a small minority of the housekeepers have ever had servants, but that minority is becoming still smaller. Just how many private families keep servants it is not possible to determine from the census figures, because the total number of servants includes, without distinction, many that are employed in hotels, boarding-houses, and restaurants; and on the other hand, there are some families that have more than one servant.

"It is fairly evident, however, that the number of families having servants must have been smaller in 1920 than it was in 1910, and somewhat smaller in 1910 than it was at earlier censuses."¹⁹

4. In an earlier quotation attention is called to the change in the composition of the family. With greater eco-

conomic independence of women, increased mobility of population, and smaller dwellings, unmarried relatives who relieve the wife and mother are less likely to be permanent residents of the family. Neither does one find the second generation so likely to settle down in the locality where the grandparents live, thus limiting the amount of help which the younger couples may have from parents in taking care of the children, and the assistance which could be counted upon in case of need.

5. In both the urban and the rural areas the division of labor between husbands and wives seems less distinct than one might expect. But the sharing of responsibilities is done for different reasons. The situation which exists in *Middletown** is possibly typical of that which would be found in other places:

"At no point can one approach the home life of Middletown without becoming aware of the shift taking place in the traditional activities of male and female. This is especially marked in the complex of activities known as 'housework,' which have always been almost exclusively performed by the wife, with more or less help from her daughters. In the growing number of working-class families in which the wife helps to earn the family living, the husband is beginning to share directly in housework. Even in families of the business class the manual activities of the wife in making a home are being more and more replaced by goods produced and services performed by other agencies in return for a money price, thus throwing ever greater emphasis upon the money-getting activities of the husband. This is simply another instance of the shuffling about of 'men's ways' and 'women's ways' observable among all peoples, for 'it is partly a matter of accident as to how culture is adjusted to the two parts of the group.'"²⁰

6. The assistance which husbands give their wives shows considerable variation:

"The assistance given by the husband, as has been suggested, varies. If there is any one task that is regularly assumed by the men of the family, it is more than likely to be the care of the fires. In the homes included in this study, practically 75 per cent tended fires as a part of

* From *Middletown*, by Robert S. and Helen Merrell Lynd, copyright, 1929, by Harcourt, Brace and Company, Inc.

their daily routine; less than $33\frac{1}{3}$ per cent cared for the grounds; 20 per cent took care of minor repairs; less than 10 per cent did the shopping for the family. Occasional tasks include helping with the dishes, with seasonal cleaning, with laundering, and with food preparation, in the order given.

"A part of the physical care of the children is quite commonly regarded as the father's job. This is particularly true in dressing the children before they are old enough to assume the full responsibility of this task. Some of the play time is also supervised and indulged in by more than half of the fathers, and the practice of taking the children to places of interest, to schools, and on various jaunts is common in nearly half of the homes. Other responsibilities that are carried in a smaller number include help at meals, bathing, attention to any needs during the night, and caring for them during the absence of the mother. Discipline is shared by the parents in varying degrees. Education, reading aloud, and companionship are reported in less than 20 per cent. There is, of course, the question as to how fully the figures indicate the actual situation and how much may have been omitted unintentionally in the replies." ²¹

The advantages of the rural home are seen in the following statement:

"The nature of farming and the proximity of home and farm create a situation in which more assistance can be given by the husband than is likely to be the case in urban families. A lack of modern conveniences in the rural home makes his cooperation also more essential. The effect of a partnership, such as farming makes possible, encourages a sharing of tasks in some of the homes and also more likelihood of leisure spent together in an ever increasing number of common joys and some sorrows. This occupation seems to afford a very special opportunity, as well, for children and father to know each other and to have time for daily companionship about the farm." ²²

ASSISTANCE OF CHILDREN IN WORK OF THE HOME

The degree to which children contribute their services in the home varies with the skill of the parents in directing them, the philosophy regarding the part they should play in the home, their ages, and the hours that they spend in school.

1. In a study ²³ made in Denver the activities of junior and senior high school girls show the following frequency distribution:

<i>Activity</i>	<i>Percentage</i>
Helping with daily and weekly cleaning.....	100
Setting the table.....	88
Going to the store.....	83
Helping with washing dishes.....	72
Caring for own room.....	70
Helping with dinner.....	62
Caring for own clothing.....	57
Waiting on table.....	56
Helping with ironing.....	46
Spending own allowance.....	45
Helping with breakfast.....	44
Helping in canning.....	35
Putting up own lunch.....	34
Average number selecting ready-made wearing apparel	32
Helping with laundry.....	31
Helping with care of younger children.....	29
Constructing garments.....	25

The explanation of the place which cleaning occupies is given by the authors as follows:

"Some phase of housekeeping activities was indicated by 100 per cent of the junior and senior high school girls as being their most frequent duty in the home. This is probably due to the fact that the field of housekeeping duties is easily subdivided into smaller units which are not dependent upon a continuous process for successful completion. These smaller units of work are readily assignable to the school girl who usually has but short periods for work in her home."²⁴

2. A slightly larger number of junior and senior high school students in Minnesota²⁵ provided information which reveals the place that they occupy in the activities of their homes. More than eight out of every ten care for their own person by shampooing their hair and manicuring their nails. Six out of ten wash their own hose and the same number make their own beds. Setting the table and washing the dishes are reported by practically half of the group of 6,165. In the activities with which they help, food preparation, washing dishes, setting and clearing table, ironing, putting groceries away, cleaning silver, cleaning cupboards, cleaning the entire house, care of flowers, and the entertainment of guests are reported by a half or more.

3. A study of the activities performed frequently or occasionally by 403 girls of junior and senior high school age in Tennessee²⁶ shows the following activities reported by the largest number:

A STUDY OF HOME ACTIVITIES FOR GIRLS OF JUNIOR AND
SENIOR HIGH SCHOOL AGE

<i>Type of Activity—</i>	<i>Percentage of Girls Doing Tasks Fre- quently or Occasionally</i>	<i>Percentage of Mothers Wishing Girls to Do Tasks</i>
<i>Care of Self:</i>		
Care of nails.....	95.5	94.4
Shampooing hair.....	92.3	93.4
<i>Care of House:</i>		
Dusting furniture.....	90.3	91.9
Making own bed.....	88.0	94.8
Caring for own room.....	87.0	89.7
Sweeping kitchen.....	83.6	85.4
Washing windows and mirrors.....	80.1	81.7
Making beds for others.....	71.9	72.5
Caring for porches, walks, and halls.....	70.9	65.0
Hanging pictures.....	60.2	67.3
Caring for clothes closets.....	58.6	63.8
Caring for bureau drawers.....	56.7	61.5
Scrubbing floors.....	52.8	51.5
<i>Preparing Food and Washing Dishes:</i>		
Setting table.....	90.4	89.8
Washing dishes alone.....	73.0	73.8
Helping with dishes.....	69.2	70.9
Helping to prepare dinner.....	66.7	72.4
Cleaning stove and cooking utensils.....	64.0	68.0
Helping to prepare breakfast.....	63.5	73.8
Baking cakes and pies.....	63.2	73.8
Cleaning silver.....	59.5	65.9
Waiting on table.....	61.4	67.4
Helping to prepare lunch.....	56.7	58.6
Making bread.....	55.3	68.8
Helping to can.....	47.1	62.0
Preparing lunch alone.....	44.9	58.6
Packing lunch for self.....	42.4	60.1
Planning the meals.....	37.0	55.7
<i>Care of Younger Children:</i>		
General assistance.....	62.1	49.2
Playing games.....	59.5	46.3
Reading stories.....	56.9	48.4
Dressing.....	56.1	42.7
<i>Miscellaneous:</i>		
Arranging table, dressers.....	86.1	83.3
Entertaining callers.....	77.9	66.6
Fighting flies and other pests.....	75.4	76.0
Arranging flowers.....	72.9	72.4
Building fires.....	67.5	55.8
Working in garden.....	69.5	73.2
Caring for yard.....	60.2	68.8
Answering telephone.....	59.8	50.0
<i>Care of Clothing and Clothing Construction:</i>		
Washing own hose.....	88.8	90.5
Shining and caring for shoes.....	82.6	82.5
Washing powder puff, comb.....	78.6	73.1
Ironing own clothing.....	70.7	78.9
Doing own pressing.....	67.7	79.9
Mending, repairing, or darning.....	59.0	72.6
Making own underwear.....	52.6	73.1
Making own wash dresses.....	48.1	70.2
<i>Managerial Activities:</i>		
Selecting own hats and shoes.....	85.5	83.9
Selecting own furnishings.....	52.8	55.0
Earning money for own use.....	32.7	59.3
Having savings account.....	31.2	60.0
Making deposits at bank.....	30.3	47.8
Having an allowance.....	28.5	47.7
Helping with budgeting.....	17.7	35.4
Having own expense account.....	14.7	47.7
Selecting own clothing.....	82.1	78.9

DIFFERENTIATION IN TRAINING BOYS AND GIRLS

There is need, too, for an appreciation of the fact that early differentiation in the training of boys and girls is likely to make certain responsibilities of the home seem less masculine. This has the effect of a division of labor later on which may be undesirable, but which is so well grounded in tradition that it is difficult to change.

1. This point is brought out in Denver Study ^{23a} to which reference has already been made:

"It is extremely interesting to note that 54 per cent of homemakers as against 16 per cent favor a required course in home economics for boys in high school. Here is a situation teeming with possibilities for teaching home relationships. The parents are thus indicating that at least in some home economics courses there should not be a differentiation on the basis of sex. The objective evidence so far as home economics courses for boys are concerned indicates clearly that from the adult viewpoint, the least that can be done is to provide for boys an elective course in this subject in senior high school."

Obviously from the standpoint of educational value to the child not all tasks are equally desirable, particularly if they are carried on with too little supervision, or over a long period of time. Practice will not make perfect if the teacher lacks the time or the technique to help the child improve and to recognize improvement. The child who does the dusting week-in, week-out, or who washes the dishes three times a day, may be relieving her mother from certain routine work, but after she reaches a certain degree of facility in the performance of these tasks the mere repetition is of little value in acquiring manual skill. Educationally speaking, she should pass on to other tasks that introduce opportunities for acquiring new skills.

It is easier for the mother, with a full schedule of household activities, to do the work herself than to find time to teach her child to assist her; and for this reason the training of children in the performance of household tasks too often is indefinitely postponed.

From the foregoing studies it would seem that in spite of

the changes that have taken place in the work of the home in recent years it still affords opportunity for training the younger members in manipulative skills, in scientific knowledge, and in artistic appreciation and expression, both as a part of the child's general education and as a training for family life. In addition, and increasingly important in the present age, are the opportunities the home provides for the development of powers of adjustment and of a sense of social values and responsibilities. Cooperation, respect for law, tolerance, and consideration of others may be taught in the home provided the parents see the home as a center for education of the children. Perhaps it is fair to say that uncertainty as to the amount and kind of education which the activities of the home can well provide and the failure to make the best use of present opportunities may be due to the extent and rapidity of the changes which are taking place in the home.

THE CARE OF THE HEALTH OF THE FAMILY

There is probably no phase of management in the home which is more marked in its effect on the development of the child than the care of health. Chronic or acute illness in the family necessitates adjustments that may be exceedingly costly not only in terms of money but of the accomplishments of its several members.

1. No information has been secured on studies relating to a comparison of health of women engaged in homemaking with those in other types of work, but the following statement is suggestive in this connection:

"Illness made a considerable claim upon the time of the homemakers . . . The home-maker loses time not only because of her illness but also because of the illness of other members of the family, as it is usually she upon whom the burden of caring for the sick falls.

"The women in this group reported more than twice as many days of illness during the year as did their husbands. Industrial records show that women employed lose slightly more time than men, but they do not show the great difference in time lost by women and by men that this study shows. It is impossible to explain this difference without more complete information as to the nature of the illness repre-

sented . . . The majority of the women in this group are within the child-bearing period and childbirth may account for a large part of the illness reported by the home-makers." ²⁷

Abraham Myerson's book, *The Nervous Housewife*, indicates the frequency with which home-makers suffer from neurosis. In this connection, however, one notes the need for studies of unselected groups of women before adequate information is available.

2. A study ²⁸ throwing light upon the effect of the environment of the home upon the mental health of the child is that reported by Esther Loring Richards: Twenty-six per cent of the 623 children examined in a three-year period at the Phipps Psychiatric Dispensary of the Johns Hopkins Hospital showed "pure cultures of neurotic traits uncontaminated by mental retardation, delinquency, or somatic deficit of any kind"; 13 per cent of these exhibited definite tendency toward hypochondriacal complaints.

Quoting from the report of the study one finds the following explanation:

"Here, in all but one of these twenty-two cases, we see children who expressed complaints that they had absorbed from an atmosphere charged with hypochondriacal utterance and fear of disease, objectively reinforced by numerous prescriptions, patent medicines, and the medical folklore of neighborhood gossip. With the pattern of these reactions well established through the daily contacts of actual behavior, it needed but the catalyzing agent of some unusual circumstance or emotional strain to produce a symptom picture quite baffling to the ordinary approaches of clinical procedure. The disease problem here embraces not only the complaining child, but the whole family of which he is so often an insignificant part." ²⁹

DIRECTION OF ABILITIES OF MEMBERS OF THE FAMILY

A phase of home management which has received but little recognition is that dealing with the personnel of the group. In fact, to many the term "management" as applied to the home environment still means merely the scheduling and despatching of its activities. Studies which throw light on the principles underlying the direction of the individual member in the family and of relationships between members

are few, yet their importance to the health and development of both child and adult is clearly apparent. There is need for students in the fields of management, psychology, sociology, and child guidance to initiate cooperative researches which will provide information on the personnel phases of family life.

The new management movement in industry has long since departed from a consideration of processes only, and has placed an increasing emphasis upon the human factor. Books, such as Faegre and Anderson's *Child Care and Training*, and Thom's *Everyday Problems of the Everyday Child*, point out the relation of good management of the activities to the well being of the child. A few studies of successful family life have been undertaken and it is desirable that others should be developed to determine the factors which promote physical, mental, emotional, and social growth of the individual.

SIGNIFICANT FINDINGS

RURAL WOMEN

According to the foregoing studies the time of the farm woman is still largely occupied with household activities. Each week she averages sixty-two hours spent in household tasks. Of these she devotes:

7½ hours to cleaning
5¼ hours to laundering
1½ hours to mending
4½ hours to sewing.

The rest of the time she bakes and cans, takes care of the milk and makes butter, looks after the poultry, and does a little gardening, and upon occasion assists in the outside work of the farm.

Conveniences. Four-fifths of the farm homes have separators and three-fourths washing-machines, but very few are equipped with running water, bathtubs, or chemical toilets. As a result the average farm woman spends 171 hours a year, and travels 42 miles carrying water for household purposes.

Outstanding Needs of the Farm Woman.

To shorten her working day
To safeguard the health both of mother and children
To lessen the amount of manual labor
To raise the standard of comfort and beauty of the farm home
To develop and introduce money-yielding home industries where necessary to make home improvement.

Advantages of the Farm Home. The proximity of home and farm and the lack of conveniences tend to create a situation in which the farm husband is able to give more assistance in household tasks than the urban husband.

The effect of the farm partnership encourages a sharing of tasks, permits more leisure time spent together, and affords special opportunities for children and father to know each other through daily companionship about the farm.

CITY WOMEN

The city woman is also largely engaged in household tasks. In cities of 2,500 to 50,000, each week she spends on an average 51 hours at household tasks; in larger cities of 50,000 or over, 48 hours a week. Only 10 per cent of the women, even in large cities, spend less than 35 hours a week at their home-making.

Like the farm woman, the city woman puts in on an average:

7½ hours cleaning
5¼ hours laundering
1½ hours mending
4½ hours sewing.

The city woman spends a few more hours than the farm woman each week on the care of her children and purchasing, and a few hours less in cooking and dishwashing.

CHANGE OF EMPHASIS

The evidence, on the whole, points not to less time spent in household activities but to a shift of emphasis. There are several factors that enter into this change of emphasis.

Resources of the Community. Commercial bakeries have lessened the amount of time spent on baking bread and rolls; commercial canning, the time spent both on canning and on cooking; dressmakers and ready-to-wear clothing, the time spent on sewing; and the commercial laundries and cleaning establishments, the time spent on laundry work and dry cleaning.

Labor Saving Devices. The use of electrical equipment, such as electric irons, vacuum cleaners, washing machines, removes the drudgery from housework and makes possible a higher standard of comfort, efficiency and cooperation in the home. These devices release time and energy which can be used for other purposes than routine household activities. They enable mothers to utilize the help of children and thus are a means of training them for the future when the use of labor-saving devices will be more prevalent than now. They provide an opportunity to teach the child the wisdom of making the best possible use of time.

Gas stoves make cooking easier and cleaner; the range with the oven-heat regulator makes baking almost fool-proof; and the gas heater automatically supplies hot water.

All of these save time, make household tasks lighter and pleasanter, and release time and energy to be devoted to child development.

Amount of Assistance in the Home. Greater economic independence among women and smaller dwellings have reduced the number of "old maid" sisters and daughters performing the duties of domestic servants without compensation. Mobility of population has tended to reduce the amount of help which may have been contributed by parents.

Because, in a growing number of working and business-class families, the wife helps to earn the living, the husband is beginning to share directly in the housework. The manual activities of the wife in making a home are being replaced by goods produced or services performed by other agencies in return for a money price.

The amount of assistance in household tasks rendered by children depends upon the skill of the parents in direct-

ing them, their philosophy regarding the part children should play in the home, the ages of the children, and the hours they spend in school. The foregoing studies indicate that children still assist in many of the household activities.

There is a diminution of the number of full-time servants. This is due: to increased opportunities to get a living in other kinds of work; to increased cost of from ten to fifteen dollars a week as against three dollars in 1890; to increased attention to child-rearing, making mothers more careful of the kind of servants they employ; to greater difficulty of securing properly trained servants; to the check of immigration; to reduction of size of homes and the increase of apartments; to simplification of housekeeping by the use of electricity, and other labor-saving devices; resorting to restaurants and cafés for meals; and to a tendency to substitute the woman who comes in by the day for the full-time servant who lives in the home.

CHANGING VIEWPOINT

Among women of the city especially, there are indications of a changing viewpoint. There is a tendency toward more mental and less physical labor in the homes. Housekeeping is beginning to be considered merely as the background or stage of family life, as a means, not as an end—the end being the fullest enjoyment of life. For this reason, housekeeping tasks are made as short as possible and time thus freed by good tools, and other means, is being devoted to increased attention to child-rearing.

RECOMMENDATIONS

More thoughtful consideration should be given to the share which the child takes in the work of the home.

Less emphasis should be placed on the amount of assistance rendered and more on the educational values (to the child) of the responsibilities involved in the performance of household tasks.

Greater consideration should be given to the possibilities for education which the home affords for the preschool child.

For the school child (during school time) greater emphasis should be placed on the daily opportunities for and methods of training in cooperation and other social activities, in which (because it is not a matter of hours) training may be carried on without increasing demands on the school-free time of the child.

Parents and teachers should cooperate in utilizing the opportunities afforded by summer vacation periods for further training and development of children.

A larger place should be given in the school system for education in family life and the responsibilities associated with it.

In order to serve the child in the best possible manner, studies should be made of the choice of tasks, hours of work, standards demanded, and the supervision to be given both in the home and in the school.

The standards of living and the daily schedule of the family should be readjusted to include the education of the child.

The problem of finding methods, within the reach of the family pocketbook, of conserving the time and energy of parents, particularly during the years when the children are young, needs to be studied.

The assistance of fathers in the home should be devoted to home-making rather than to housekeeping.

Emphasis should be placed on the need of training both child and adult toward the most effective use of time, energy, and abilities.

In teaching home economics and in other phases of educational work, emphasis should be placed on the simplifying of housekeeping standards in time, energy, and money costs.

Research studies should be made on:

The amount of time and energy saved by the use of different kinds of equipment;

The cost of making the saving;

The comparative cost of doing various housekeeping tasks in the home with labor-saving equipment and of using large-scale commercial equipment or cooperative substitutes which could be provided.

Objective studies in determining the factors which promote successful family life should also be made.

Consultation centers on home-making in connection with nursery schools, marital clinics, or extension programs, to serve the "normal" family should be established.

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¹¹ Kneeland, Hildegard. "Woman's Economic Contribution in the Home." *The Annals of the American Academy of Political and Social Science*, Vol. 143, pp. 33-40.

¹² ———. "Is the Modern Housewife a Lady of Leisure?" *The Survey*, Vol. 62, pp. 301-302.

¹³ Wilson, Maud. Reports in preparation at the Agricultural Experiment Station of Oregon State College, Corvallis, Oregon, will provide additional information on "time costs" of different household activities.

¹⁴ American Home Economics Association. "Applications of Electricity to Domestic Use." *Journal of Home Economics*, Vol. 22, p. 636.

¹⁵ Lindquist, Ruth. *A Study of Home Management in Its Relation to Child Development*. Moore Bros., Pittsburgh, Kansas, 1930. p. 38.

¹⁶ Lynd, Robert S. and Helen Merrell. *Middletown*. Harcourt, Brace and Company, New York, 1928. pp. 169-171.

¹⁷ Stocks, Esther H. *A Community Home Assistants Experiments*. Smith College, Northampton, Mass.

¹⁸ Hill, Joseph A. *Women in Gainful Occupations, 1870-1920*. Government Printing Office, Washington, D.C.

¹⁹ *Ibid.*, pp. 36-40.

²⁰ Lynd, Robert S. and Helen Merrell. *Middletown*. Harcourt, Brace and Company, New York, 1928. pp. 167.

²¹ Lindquist, Ruth. *A Study of Home Management in Its Relation to Child Development*. Moore Bros., Pittsburgh, Kansas, 1930. pp. 21-28.

²² *Ibid.*, p. 109.

²³ Hopkins, L. Thomas, and Kinyon, Kate W. Research Monograph Number 1, Home Economics. Denver Public Schools, 1925.

^{23a} *Ibid.*, p. 36.

²⁴ *Ibid.*, p. 36.

²⁵ Kever, Aura. An unpublished study on the home activities of junior and senior high school students of Minnesota, by Supervisor, Department of Home Economics Education of Minnesota.

²⁶ Browder, Margaret. An unpublished study on the home activities of junior and senior high school students in Tennessee.

²⁷ Clark, M. Ruth, and Gray, Greta. *The Routine and Seasonal Work of Nebraska Farm Women*. Agricultural Experiment Station, University of Nebraska. Bulletin 238, pp. 33-35.

²⁸ Richards, Esther Loring, M.D. "Hypochondriacal Trends in Children." *Mental Hygiene*, Vol. 7, pp. 43-69.

²⁹ *Ibid.*, p. 47.

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ALTHOUGH parent education in the management of family finances is a relatively recent development in the educational world, its importance is being more and more emphasized. The management of the finances of his own particular family is of crucial importance to every child. On the wisdom of that management depends not only his physical well being, but also his first economic education. If his family's money income is too small, or if it is badly administered, he may not only suffer for want of the essentials of food, clothing, sunlight, quiet sleep, warmth in winter, recreation, medical attention, and education, but he will also lack the sense of security and tranquillity in his home, without which no child can develop properly. For the farm child almost as much as for the town child, these essentials depend on an adequate money income, since the farm can supply directly only part of the most urgent needs of country children.

If the parents are wise, the child will not only take part in the family plans for the use of its money, but will also have a sum, in proportion to the family means, for his own exclusive use, so that he may "learn to spend by spending." Just how these matters are to be arranged is a serious problem to many parents. Education in the management of family finances is needed to help them to utilize the experience of others in translating their money incomes into those goods and services which are necessary for satisfactory child life.

In general it is true that wherever courses are being given in home economics, and wherever social workers are attempting to solve individual family problems, parents, or prospective parents, are being taught something about the management of family finances in the interest of children.

Even though such teaching is not yet available to large numbers of parents in the United States, in many communities a systematic effort is being made to teach what is commonly called "budgeting." Undoubtedly many families are being assisted through this teaching to a more systematic planning of their expenditures, but teachers, social workers, and most important, parents themselves, are asking for more definite information to assist them in this task.

In recent years there have been many studies of different factors affecting child health, and a number of studies of family expenditures, but there have been singularly few studies in which the two are combined.¹ * Some of the teaching in this field rests upon generalizations from the financial experience of a very few families who have managed their affairs successfully, and more of it upon averages derived from the money expenditures of large numbers of families, studied without relation to the health and well being of either parents or children. There is in many cases the unexpressed and quite unwarranted assumption that average practice is desirable practice.

If there is to be successful work done in teaching parents about ways of managing family finances in the interests of child health and development, the materials for their instruction must have a double foundation. It is necessary to ascertain, first, the conditions essential for child health and, second, the amount of money required under different circumstances to create those conditions.

Budgeting for family expenditures began to be discussed generally in the United States in the last quarter of the Nineteenth Century. At that time the production of many articles was being transferred from the home to the factory and the number of things which most families procured by money expenditures was increasing year by year. These early discussions of budgeting were based largely on average figures collected in investigations of the expenditures of working-men's families, carried on by the Departments of

* Numbers, except when used in connection with tables, refer to literature cited at close of this chapter.

Labor of Maine, Massachusetts, Montana, Nebraska, and, after 1891, by the Department of Labor of the Federal Government.

In 1899 Ellen H. Richards, who for many years had been lecturing on such subjects as "Chemistry in Relation to Household Economy," published a book called *The Cost of Living as Modified by Sanitary Science*, which contained suggestions for dividing the total income of families of father, mother, and two or three children (or four adults) on four different income levels, among expenditures for food, rent, operating expenses, clothes, and higher life. Although she did not say so specifically, it seems evident from her discussion that the distribution of expenditures recommended was based primarily on her own household accounts and on similar accounts from other professional families. She says in the preface to the third edition of the book (1910): "Just as this edition was going to press, two family budgets were received of the type I greatly desire to have—incomes of about \$3,000 and the spenders with ideals to live up to." In developing what she called the "science of controllable environment" or "euthenics," Mrs. Richards drew extensively on the scientific information of her day, but she clearly recognized how much there was for science yet to investigate before any really satisfactory statements could be made about either the ways of living most conducive to health, or their cost. She wrote: "I am forced to the conclusion that there is very little knowledge as to what good food is or what it costs. . . . Scientific investigation is needed in this field as much as in any other."

For at least fifteen years after her book on *The Cost of Living* was first published, the distribution of family expenditures suggested by Mrs. Richards was much used in teaching, but social workers attempting to solve the expenditure problems of dependent families began to work out more detailed budgets shortly after 1900. These detailed budgets were much needed.

There were a great many families not composed of "two adults, and two or three children, or four adults," and dif-

ferences in composition of family necessarily must make a distinct difference in the way the income is apportioned. A formula presenting one set of proportions to be applied at each income level gives no clue as to the way revisions should be made when size and composition of the family differ from the model.

In 1906 Miss Caroline Goodyear of the New York City Charity Organization Society made a study of the dietary habits and money expenditures of some tenement-house families.² In the same year, the New York State Conference of Charities and Corrections initiated a study of the *Standard of Living of Working-Men's Families in New York City* under the direction of Professor Robert Coit Chapin.³ In the fall of 1907 Dr. Lee K. Frankel, the Chairman of the Committee of the Conference, working with Professor Chapin, was able to report the lowest money expenditure which had been found, on the average, to provide "a fairly proper standard of living," for a family of five individuals with three children under fourteen years of age. The expenditures necessary to procure an adequate diet in New York at that time had been computed, after an analysis of one hundred family dietaries, by Dr. F. P. Underhill, Assistant Professor of Physiological Chemistry, Yale University.

The report found that in the group with an average income of \$846 as compared with the group with an average income of \$748, "not only is the family able to live on its income, but it can save on its income. . . . There are more baths and particularly more toilets. The rooms are larger and have more light. . . . The amount that is now disbursed for food and for clothing—twenty-seven cents a day for each man—appears to be adequate." The report presents the average distribution of expenditures of families in this group, among the items of rent, carfare, fuel and light, furniture, insurance, food, meals eaten away from home, clothing, taxes, dues and contributions, recreation and amusement, education, and miscellaneous.

In 1912, Miss Florence Nesbitt, dietitian in the Funds to Parents Department of the Juvenile Court of Cook

County, Illinois, spurred on by the necessity for budgets which could be used in granting allowances to dependent families, developed estimates of adequate minimum budgets on which were based pensions for the support of the children in dependent families. This budget, in the form of a very short, simple statement of the estimated necessary expenditures of a dependent family living on a minimum-of-subsistence standard, was first published as an appendix to *The Charity Visitor*, by Amelia Sears of the United Charities of Chicago.⁴

"These expenditures included rent, food, clothing, household furnishings and supplies, heat, and light, and other miscellaneous items; and the estimates for them were based upon the current prices which were being paid in neighborhoods in which dependent families lived. These estimates had especial value because they were based upon the knowledge of the home economics expert as to the needs of individual families of varying size and composition, and not upon average expenditures of groups of families.

"Since 1913 this 'standard budget' has been many times amplified and revised in accordance with the higher cost of living and the more complete understanding of the essentials necessary to maintain a family during the period of its dependence."⁵

Miss Nesbitt's budget in the 1929 revision is now published in a separate pamphlet by the Chicago Council of Social Agencies as *The Chicago Standard Budget for Dependent Families*.

The period of rapidly rising living costs which began shortly after the opening of the World War upset many of the previously established money relationships, and a large number of new budget plans began to appear from a variety of sources. The new budgets were in some cases presented with a great deal of detail, and with specific attention to the needs of persons of different ages. In other cases, the authors were content with recommendations for a family of five on the theory that this is the most usual type of family composition and that a budget prepared for this type

of family can be adapted to the needs of families of different make-up.

It is impossible to discuss within the scope of this report all the family budgets which are now in use by different groups of people. In the table on page 103 three urban budgets made up from different points of view are summarized. Two very widely used relief budgets, that of the Boston Budget Council of the New England Home Economics Association and that of the Home Economics Committee of the Cleveland Associated Charities are not presented in the table but are discussed in what follows. Their budget material is arranged in such a way that it can be readily adapted to the needs of families of different composition.

Of the three budgets given, the first is based on the *Minimum Quantity Budget* of the United States Bureau of Labor Statistics, which appeared in the *United States Monthly Labor Review* of June, 1920. It was priced in Chicago in 1929 by the Labor Bureau of the Middle West. The second—the *Standard Budget for Self-Supporting Families* of the Chicago Council of Social Agencies—is an outgrowth of work with dependent families and independent families of small income. The third budget in the following table was prepared by the National Industrial Conference Board, a research organization financed by a group of large industrial corporations for the purpose of studying some of the economic problems which they have in common.

In presenting the budget for a self-supporting family, Miss Nesbitt wrote:

“In computing a household budget for a self-supporting family, it must be borne in mind that, even when living on a scale no higher than that outlined in the first section of this report, the family which entirely pays its own way will have some expenses in addition to those provided for by the schedule for a dependent family, and it must pay more for some of the items common to both groups. It must pay its own physician and dentist, and for its school books. It does not receive gifts of clothing and toys, and has less free recreation. It must possess resources for meeting such serious emergencies as illness

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	BUDGET I	BUDGET II	BUDGET III
	MINIMUM QUANTITY BUDGET OF THE U. S. BUREAU OF LABOR STATISTICS PRICED BY THE LABOR BUREAU OF THE MIDDLE WEST, CHI- CAGO, 1929 *	STANDARD BUDGET OF THE CHICAGO COUNCIL OF SOCIAL AGENCIES FOR A SELF-SUP- PORTING FAMILY, PRICED IN 1929†	NATIONAL INDUSTRIAL CON- FERENCE BOARD BUDGET FOR BOSTON, PRICED IN 1927 ‡
	<i>Family of Five</i>	<i>Family of Five</i>	<i>Family of Four</i>
Food.....	\$681.99	\$648.00	\$573.04
Clothing:			
Father.....		{ \$70.80	\$70.43
Mother.....	\$132.70	{ 54.00	51.95
Boy of 12.....	85.27	{ 67.20 }.....	66.18
Girl of 6.....	56.33	Child 10, 54.60	
Boy of 2.....	35.00	Child 7, 43.80	
<i>Total.....</i>	<i>\$309.30</i>	<i>\$290.40</i>	<i>\$188.56</i>
Fuel and light.....	45.50 §	138.00 ¶	111.05
Household equipment.....	47.10	84.00	394.68
Miscellaneous.....	785.80	428.04	
<i>Total without rent.....</i>	<i>\$1,869.69</i>	<i>\$1,588.44 ¶</i>	<i>\$1,267.33</i>
Rent.....	562.27 §		360.00
<i>Grand Total.....</i>	<i>\$2,431.96</i>		<i>\$1,627.33</i>

* Facts for workers. - Bureau of Labor, Inc.

† Chicago Council of Social Agencies, Bull. No. 5, pp. 51-52.

‡ National Industrial Conference Board, *The Cost of Living in Twelve*

Industrial Cities, p. 51.

§ Heat is included with rent.

¶ Rent is not given in this budget. A footnote states that five rooms will be needed, as three bedrooms are necessary.

|| Sixty-six dollars and eighteen cents for clothing expenses of two average children.

of the wage-earner or his irregular employment. It should be able to contribute to church and charities and to bear its part of the expenses of organizations for civic or personal benefit. If it is to be really safe from the danger of becoming dependent in the face of an emergency, the death or incapacity of the wage-earner, or of old age, it must have insurance or a savings fund of some sort. It has not in most cases, as has the dependent family, the personal attention and advice of a professional worker whose training has included work on food values and the administration of the family budget."

Budgets expressed in money figures mean very little unless the quantitative standards by means of which the money figures were computed are given in some detail. On that account the Committee requested Miss Nesbitt, who is a member, to prepare the following comparison of the standards used in computing some of the most used urban budgets.

PROVISION FOR CHILDREN IN BUDGET CALCULATIONS

By FLORENCE NESBITT, *United Charities of Chicago*

In the past twenty years the need for estimating a minimum cost of living for families of given composition has resulted in the preparation of considerable material on which budget estimates may be based.

In wage disputes between employer and employee where the question of a living wage is discussed the minimum cost of living for a family of "average" or "typical" size is frequently given prominence, both sides offering computed budgets. For this purpose labor organizations customarily use the *Minimum Quantity Budget Necessary to Maintain a Worker's Family* of five at a level of health and decency, which was issued in 1920 by the United States Department of Labor, Bureau of Labor Statistics. The items listed in this budget are priced in the locality where the dispute is in progress and the total is regarded as the minimum cost of living for a family of this size. Employers usually use *Cost of Living in Twelve Industrial Cities*, for which material was prepared in 1927 by F. Beatrice Brower of the National Industrial Conference Board.

In the disbursement of relief to dependent families it is

necessary to compute the cost of food, clothing, and other necessities for families of various compositions. This need has stimulated the development of schedules by which a budget can be computed for a family of any given composition in organizations giving relief. There is a considerable number of such budget guides, more or less complete as to items covered. Two of these, *The Chicago Standard Budget for Dependent Families* and *Suggested Budget for Families of Small Incomes* (Cleveland) are in printed form with recently revised prices. The report of the Budget Council of Boston, multigraphed copies of which were issued by the New England Home Economics Association, June, 1929, is also a fairly complete budget guide for the use of organizations which serve dependent families. These three are used in the following pages as examples of relief budgets.

All of these budgets represent the cost of a standard of living which is the minimum of what may be considered "normal" or conducive to "health and decency." The provision made in them for children may be accepted as representing current beliefs as to the minimum material requirements for the rearing of a child. An analysis and comparison of the different items of the budget as to amounts allowed for children follows.

PROVISION FOR CHILDREN IN DIFFERENT BUDGET ITEMS

Food. The budgets used for computing relief are very specific as to allowances for food, giving the number of calories necessary for the child at different ages and specifications as to the food materials to be used. For example, each child should have from one pint to one quart of milk each day. The daily use of vegetables and fruit with leafy vegetables specified for three or four days in the week is advised, and the use of orange or tomato juice is emphasized. In the case of infants, physicians' formulae are to be exactly followed wherever the baby is artificially fed.

In giving the following estimated costs of these requirements, it is assumed that the housewife will buy wisely and manage without unnecessary waste.

ALLOWANCE FOR FOOD PER ANNUM IN RELIEF BUDGETS

<i>Age</i>	<i>Lowest Cost</i>	<i>Highest Cost</i>
Under 6 months*		\$ 79.40 (Chicago)
1 year.....	69.20 (Boston) to.....	95.86 (Boston)
2 years.....	70.20 (Cleveland) to.....	101.90 (Boston)
3 years.....	75.40 (Boston) to.....	104.00 (Boston)
4 years.....	78.00 (Boston and Cleveland) to.....	108.70 (Boston)
5 years.....	78.00 (Cleveland) to.....	113.35 (Boston)
6 years.....	80.60 (Cleveland) to.....	119.60 (Boston)
7 years.....	80.60 (Cleveland) to.....	124.30 (Boston)
8 years.....	80.60 (Cleveland) to.....	130.00 (Boston)
9 years.....	80.60 (Cleveland) to.....	134.70 (Boston)
10 years.....	95.15 (Boston) to.....	145.10 (Boston)
11 years.....	98.80 (Boston) to.....	165.00 (Boston)
12 years.....	101.40 (Cleveland) to.....	170.10 (Boston)
13 years.....	101.40 (Cleveland) to.....	177.30 (Boston)
14 years.....	101.40 (Cleveland) to.....	183.05 (Boston)
15 years.....	109.72 (Boston) to.....	187.20 (Boston)

* Cleveland and Boston make no estimate, specifying that "cost of formula" be allowed.

Both Cleveland and Boston give a minimum allowance and a higher one. The lower allowance "provides the minimum amount of food necessary for health. It anticipates the ability of the housewife to buy wisely—and does not permit any waste" (Boston); and "the minimum figures were estimated by substituting the more economical foods" (Cleveland).

The higher allowance in the above list—which in each age is that of the Boston scale applying to boys—"is a safer margin above minimum requirements. It should be used, when possible, in working with families independent of aid—in cases of tuberculosis contacts, arrested tuberculosis, and in active cases of tuberculosis when the patient is not undernourished." Fifty per cent is to be added to the higher figure for malnutrition and convalescence after severe illness.

In the Cleveland and Chicago relief budgets, extra allowances for undernourishment and ill health, according to the individual case, are to be added to the basic figures of the scale used above.

Neither the *Minimum Quantity Budget* of the Department of Labor nor the report of the National Industrial Conference Board furnishes the basis for estimating cost of

food for children at the different age levels. The Labor Bureau of the Middle West, however, pricing the *Minimum Quantity Budget* in 1929 in Chicago and North Shore towns for a labor organization, gives \$184.84 as the yearly cost of food for a boy of twelve years, \$30.81 for a boy of two years, and \$82.15 for a girl of six years.

These figures compare as follows with those of the *Chicago Standard Budget for Dependent Families* of the same date:

<i>Minimum Quantity Budget of the United States Bureau of Labor Statistics, Priced by Labor Bureau of the Middle West</i>		<i>Chicago Standard Budget for Dependent Families</i>
Boy, 2 years.	\$30.81 (525 calories)	\$91.20 (1500 calories)
Girl, 6 years.	82.15 (1400 calories)	96.00 (2000 calories)
Boy, 12 years.	184.84 (2150 calories)	142.80 (3000 calories)

The *Minimum Quantity Budget* of the Bureau of Labor Statistics allows a wider choice of the more expensive food materials, but makes no distinction between children and adults as to kind of food. The *Chicago Standard Budget* bases its estimates upon a food list made out for each age, adjusted to the child in choice of foods as well as in amounts. It is, however, only in the division of the family food allowance between adults and children that the Bureau of Labor budget estimate seems low in comparison. Its total cost of food for a family of five is \$688.02, while an estimate for the same family calculated by the *Chicago Standard Budget* would be \$598.20.

A comparison between the food estimates in the report of the National Industrial Conference Board and that of a relief budget cannot be made accurately as the two children in the former publication are referred to as "average children." Assuming them to be a girl of two and a boy of twelve years of age, the family food cost calculated by the Boston Budget Council would be \$470.60 to \$607.88, while that of the National Industrial Conference Board for Boston is \$573.04.

Clothing. In clothing as in food, the relief budgets are the only ones which furnish a basis for calculating cost for each year.

Cost of clothing, toilet articles, hair-cuts, and cleaning, reported by the National Industrial Conference Board for Boston compare with those of the Budget Council of Boston as follows:

<i>National Industrial Conference Board</i>	<i>Budget Council of Boston</i>
Boy of 2 years..... \$35.22	\$32.67 to \$39.20
Girl of 6 years..... 45.57	44.77 to 53.70
Boy of 12 years..... 52.58	56.20 to 67.40

To the clothing figures given on pages 70 and 74 of *Cost of Living in Twelve Industrial Cities*, \$11.70 was added for each child to provide for the toilet articles, hair-cuts, cleaning allowed in their budget.

The Labor Bureau of the Middle West in its report on the cost of the *Minimum Quantity Budget* in Chicago and North Shore towns, gives a few figures on cost of clothing which compare with the *Chicago Standard Budget* as follows:

<i>United States Bureau of Labor Statistics Budget Priced by the Labor Bureau</i>	<i>Chicago Standard Budget</i>
Boy of 2 years..... \$25.00	\$29.40
Girl of 6 years..... 56.33	43.80
Boy of 12 years..... 85.27	54.60

The range of clothing allowances provided by the three budgets used in giving relief is as follows:

Layette.....	\$13.00	(Cleveland) to	\$23.85	(Boston)
1 year.....	18.20	(Cleveland) to	23.23	(Boston)
2 to 4 years.....	18.20	(Cleveland) to	32.67	(Boston)
5 years.....	18.20	(Cleveland) to	43.80	(Chicago)
6 to 9 years.....	23.40*	(Cleveland) to	44.75	(Boston)
10 to 12 years.....	33.80*	(Cleveland) to	56.20†	(Boston)
13 years.....	33.80*	(Cleveland) to	67.44†	(Boston)
14 years.....	33.80*	(Cleveland) to	88.38†	(Boston)
15 years.....	33.80*	(Cleveland) to	88.38†	(Boston)

* The estimate for girls. † The estimate for boys.

The Budget Council of Boston, which in every instance except one furnishes the highest estimates among the relief budgets, advises adding 20 per cent to those given above, wherever possible, to allow for more changes of underwear and better quality of outer garments, thus making it possible to maintain a higher standard of personal cleanliness and appearance.

Housing. The *Minimum Quantity Budget* gives a housing standard of one room for each person exclusive of bath as the "minimum requirement consistent with health and decency."

In the report of the National Industrial Conference Board four rooms and bath are mentioned as desirable for a family of four. However, "the prevailing form of housing in each locality . . . , the type of shelter upon which the majority of wage-earners' families must depend" ⁶ is accepted as a basis for calculation of cost of this item of the budget.

The report of the Budget Council of Boston stipulates "not more than two persons in a room exclusive of the kitchen and living-room, and individual toilet and bath." The *Chicago Standard Budget for Dependent Families* includes in its housing standard at least one sleeping-room for the children of each sex, besides one for the parents, a kitchen, and living-room.

In accordance with these standards, the cost of one room may be charged to the expense caused by a child, except in the family where there are two children who share a sleeping-room.

The Labor Bureau of the Middle West in its report of the 1929 cost of the *Minimum Quantity Budget* (Chicago and North Shore towns) estimates that elimination of a twelve-year-old boy from a family of five will save \$110.78— $\frac{1}{5}$ of \$553.92—rent of one room.

The National Conference Board estimates rents for a family of four from:

\$240.00 a year in Leominster, Mass. to
360.00 a year in Boston, Mass. and
385.02 a year in New York City, or

\$60.00— $\frac{1}{4}$ of \$240—total rent a year in Leominster, Mass., is charged to cost of child;

\$90.00— $\frac{1}{4}$ of \$360—total rent a year in Boston, Mass., is charged to cost of child;

\$96.25— $\frac{1}{4}$ of \$385.02—total rent a year in New York City, is charged to cost of child.

COMPARISON OF QUANTITY BUDGETS

Comparison of quantity budgets shows some variation, in both number and type of garments allowed, but on the whole there is considerable agreement as to necessary amounts, the chief difference in the lists being in the quality of garments allowed. It was possible to compare quantities in all of the different budgets for a twelve-year-old boy with the following results:

<i>Article</i>	<i>Minimum Quantity Budget of the U. S. Bureau of Labor Statistics</i>	<i>Cost*</i>	<i>Industrial Conference Board</i>	<i>Cost (Boston)</i>	<i>Boston Budget Council</i>	<i>Cost</i>	<i>Chicago Standard Budget</i>	<i>Cost</i>
Topcoat and other outside garments	$\frac{1}{2}$ coat $\frac{1}{2}$ sweater	\$6.44	$\frac{1}{2}$ mackinaw $\frac{1}{2}$ sweater	\$4.28	$\frac{1}{2}$ coat or mackinaw $\frac{1}{2}$ sweater	\$5.75	$\frac{1}{2}$ topcoat 1 sweater	\$5.50
Suits and over- alls	1 suit 1 wool trousers 2 cotton trousers 1 overall	24.34	1 woolen suit 2 cotton trousers	9.33	1 suit 1 khaki trousers 1 corduroy trousers	10.50	1 suit with 2 pairs trousers 2 cotton trousers 1 pair wool trousers 1 overall	10.25
Shoes and re- pairs	3 pairs high 2 pairs low 5 repairs (half soles and heels) 1 pair rubbers	28.08	1 pair oxfords 2 pairs high 1 pair sneakers 1 pair rubbers 3 repairs (half soles and heels)	13.96	4 pairs 1 pair rubbers 4 repairs	16.95	3 pairs 2 pairs tennis 1 pair rubbers 3 repairs (soles and heels)	18.00
Blouses	5	5.20	4	2.48	6	4.14	6 (home-made)	2.60

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Caps	2	2.24	2	1.59	½ winter 1 summer	1.50	2	1.50
Underwear	3 summer 2 winter	5.68	2 summer 2 winter	2.82	2 heavy 3 light	4.07	2 suits	2.50
Gloves	2 knitted	1.56	1	.52	1	.59	1	.50
Stockings	12	4.20	2 woolen 8 cotton	3.10	10	3.90	3 woolen 8 cotton	3.50
Night clothing	2	2.66	2	1.96	2	2.00	2	2.00
Umbrella							Umbrella or rain- coat	1.50
Accessories	6 handkerchiefs 2 ties 2 garters ½ belt	2.39	6 handkerchiefs 2 ties 2 garters ½ belt	1.34	10 handker- chiefs 3 ties 2 garters ½ belt	2.55	6 handkerchiefs ties garters belt	1.75
Incidentals	3 per cent of total cost of clothing	2.48	Cleaning supplies and toilet articles	.50 11.70	Haircuts, toilet articles, cleaning	4.25	Haircuts, toilet art- icles	5.00
Totals.....		\$85.27		\$53.58		\$56.20		\$54.60

* The cost calculated by the Labor Bureau, Incorporated, of Middle West, 1929, in Chicago and North Shore towns.

None of the relief budgets gives an estimate for cost of housing, as it is ascertained for each family according to circumstances.

Heat, Light, and Upkeep of Household Equipment. In calculating the amount saved by the elimination of a child from the family, the *Minimum Quantity Budget* by the Labor Bureau of the Middle West, 1929 (for Chicago and North Shore towns) estimated these items for one room as follows:

Heat Saving.

\$20.06 ($\frac{1}{5}$ of \$100.30)—cost of heating one room.

Electricity and Gas Saving.

\$15.16 ($\frac{1}{5}$ of \$75.84)—cost of lighting one room.

Saving on Replacement of Household Equipment.

\$6.73 (7 per cent of total cost of equipping one room.)

\$41.95 *Total Saving on Heat, Light, and Equipment.*

The National Industrial Conference Board in its report calculated as follows:

Cost of Fuel and Light.

\$54.06 a year in Butler, Pa.

\$127.60 a year in Springfield, Mass.

Cost of Upkeep of Household Equipment.

\$54.00 a year or seventy-five cents a week is estimated for the upkeep of household equipment in all of the cities covered by the survey of the National Industrial Conference Board.

The National Industrial Conference Board estimated that for a family of four persons the cost of heat, light, and upkeep of household equipment for one year in Boston, Mass., was as follows:

Cost of Heat, Light, and Upkeep of Household Equipment.

\$165.05 a year.

\$41.26 ($\frac{1}{4}$ of \$165.05) may be considered the allowance for the child's room.

The *Chicago Standard Budget for Dependent Families* contains an estimate for a self-supporting family of five in which:

\$198.75 is allowed for these three items;

39.75 ($\frac{1}{5}$ of \$198.75) would be the allowance for the child's room;

39.75 to \$41.95 will be assumed, therefore, to be the amount for these items chargeable to the support of a child in a large city.

Other Expenses. The National Industrial Conference Board gives in its estimate for "sundries" some amounts allowed specially for the child, others for the family as a whole.

The Labor Bureau of the Middle West in its report of the cost of the *Minimum Quantity Budget*, 1929 (for Chicago and North Shore towns) gives most of these additional items for the family group as a whole.

The relief budgets do not make definite allowances for many of these items, as they are cared for in dependent families largely through free agencies.

ALLOWANCE PER ANNUM FOR ONE CHILD

<i>National Conference Board, Boston</i>		<i>Minimum Quantity Budget as Priced in Chicago by the Labor Bureau of the Middle West</i>
Recreation.....	\$ 5.20	\$12.50 ($\frac{1}{5}$ of family allowance)*
Reading material	Included in "Other items" †	3.20 ($\frac{1}{5}$ of family allowance)
Medical care.....	10.40 ($\frac{1}{4}$ family allowance)	16.00 ($\frac{1}{5}$ of family allowance)
Insurance.....	5.20 (to provide for cost of burial)	None for children
Carfare.....	10.40	5.25 ($\frac{1}{4}$ of allowance for woman and children for 300 rides)
Other items.....	11.70 ($\frac{1}{4}$ of family allowance for other items)	10.40 ($\frac{1}{5}$ of family allowance)
Totals.....	\$42.90	\$47.35

* This division of the family allowance was made arbitrarily by the author in order to secure a figure comparable with that of the National Conference Board which allowed two and one-half times as much for adults as for children—twenty-five cents a week for adults, ten cents for children. The National Industrial Conference Board Budget provides for two children only, and the Minimum Quantity Budget of the Bureau of Labor Statistics for three.

† An allowance of thirty-five cents a week is made for the entire family for reading, stationery, postage, telephone.

Summary. Combining the cost of these allowances, made for children in the different items of the budgets under con-

sideration, should give an indication of the minimum cost of rearing a child in a large city in the United States on a standard which can be considered normal.

COST OF FOOD AND CLOTHING IN THE RELIEF BUDGETS

Under 1 year.....	\$ 92.40	to	\$108.02
1 year.....	87.40	to	123.73
2 years.....	88.40	to	141.10
3 years.....	93.60	to	143.20
4 years.....	96.20	to	147.90
5 years.....	96.20	to	165.91
6 years.....	104.00	to	173.30
7 years.....	104.00	to	178.00
8 years.....	104.00	to	183.70
9 years.....	104.00	to	188.40
10 years.....	128.95	to	212.54
11 years.....	132.60	to	232.44
12 years.....	135.20	to	237.54
13 years.....	135.20	to	258.23
14 years.....	135.20	to	289.10
15 years.....	143.52	to	293.25

Total..... \$1,780.87 to \$3,076.36

The relief budgets are unfortunately the only ones which furnish costs for food and clothing at each age. To the higher clothing figures given on page 108 have been added those from Boston, with the 20 per cent advised for maintaining a higher standard. This was done because no complete series of clothing figures calculated for a self-supporting family were available.

Other costs to be added to these figures are as follows:

Cost of Housing.

\$90.00 *National Conference Board, Boston, to*

110.78 *Minimum Quantity Budget, as priced by the Labor Bureau of Middle West in Chicago, 1929.*

Heat, Light, and Household Equipment.

\$39.75 *Chicago Standard Budget, to*

41.95 *Minimum Quantity Budget.*

Other Expenses.

\$42.90 *National Conference Board, to*

47.35 *Minimum Quantity Budget.*

Total.

\$172.65 *National Conference Board, to*

200.08 *Minimum Quantity Budget.*

TOTAL COST OF ALL ITEMS FOR THE CHILD AT DIFFERENT AGES AS ESTIMATED
IN CERTAIN MINIMUM BUDGETS

<i>Age of Child</i>	<i>Cost of Maintenance Year by Year</i>	
Under 1 year.....	\$265.05	to \$308.10
1 year.....	260.05	to 323.81
2 years.....	261.05	to 341.18
3 years.....	266.25	to 343.28
4 years.....	268.85	to 347.98
5 years.....	268.85	to 365.99
6 years.....	276.65	to 373.38
7 years.....	276.65	to 378.08
8 years.....	276.65	to 383.78
9 years.....	276.65	to 388.48
10 years.....	301.60	to 412.62
11 years.....	305.25	to 432.52
12 years.....	307.85	to 437.62
13 years.....	307.85	to 458.31
14 years.....	307.85	to 489.18
15 years.....	316.17	to 493.33
<i>Total.....</i>	<i>\$4,543.27*</i>	<i>to \$6,277.64</i>

* No allowance for interest.

PROVISION FOR CHILDREN IN BUDGETS FOR FARM FAMILIES

By FAITH WILLIAMS, PH.D., *United States Bureau of
Home Economics*

The general study of budgets for rural families is a very recent practice. The task of planning in advance the money expenditures of these families is complicated by the difficulty of measuring accurately goods received by the family from the farm without money payment. Individual farm families doubtless have, in the past, made systematic plans for apportioning their expenditures, but their efforts have not been reported very generally in the literature of family economics. In the last year or two, however, interest has developed in planning budgets for farm families in some of the States, and budget plans have been made by groups of farm men and women in cooperation with members of the Extension Service of the United States Department of Agriculture. The budgets represent plans for expenditures to provide a standard of living which these farm groups feel necessary for satisfactory family life.

In at least one instance such a budget has been made up

with the suggestion that farm land which cannot yield enough cash income to provide such a standard should be utilized in some other way. In other cases, however, the budgets have been prepared in a spirit of optimism, along with a program for attempting to increase cash incomes in the State to which they apply. Interest in budgeting for farm families has been particularly keen in the Western States and "standard" budgets in printed or mimeographed form for Wyoming, Oregon, Nevada, South Dakota, and Utah and for one Eastern State, Vermont, were available to the members of this Committee.

Since these budgets are in many ways very similar, it will not be necessary to take up each in detail. The following analysis is confined to a discussion of the earliest farm budget which the Committee has found, that published for the *Shoshone Project of Wyoming* in June, 1928, and one of the most recent, a *Budget for the Farm Families of Fall River County, South Dakota*, prepared in February, 1930.

Both budgets are made up for a family of five—father, mother, and three children. In the Wyoming budget these are a boy sixteen years old, a girl eight years old, and a baby two years old. In the South Dakota budget they are a girl sixteen years old, a boy twelve years old, and a child two years old.

The outlines of the budgets are as follows:

BUDGETS FOR FARM FAMILIES MADE UP BY COMMITTEES OF FARM WOMEN IN
COOPERATION WITH LEADERS FROM THE EXTENSION SERVICES OF THEIR
RESPECTIVE STATES

	SHOSHONE PROJECT, WYOMING, 1928*	FALL RIVER COUNTY, SOUTH DAKOTA, 1930	
	<i>Cash Expenditures</i>	<i>Cash Expenditures</i>	<i>Money Value of Food to be Furnished by Farm</i>
Food.....	\$ 360	\$ 161	\$539
Clothing.....	360	506	
Fuel and light.....	90	134	
Furnishings and other operating expense.....	100	108	
Education.....	110	201	
Recreation.....	55	207	
Church and charity.....	55	27	
Health.....	60	111	
Personal.....	...	86	
Insurance and savings.....	350	100	
Other advancement.....	...	45	
	\$1,540	\$1,686	\$539

* Committee on Nutrition recommended that the farm produce a "generous supply of essential fruits, vegetables, milk, and eggs," but did not itemize these foods nor place a money value upon them.

Because of variations in prices from one part of the country to another it is impossible to understand budgets expressed in terms of money without examining the standards on which they are based. Since this Committee is primarily interested in the welfare of the children of the family, the provisions made for the parents of the family in these farm budgets will not be given here. The amounts allowed for children by the committees which prepared the budgets are given in the following paragraphs.

Food. The importance of improving the diets of their children was impressed upon the Wyoming Committee by a report from four communities in one school district, showing that 50 per cent to 61 per cent of the pupils in each com-

munity were underweight. The standards for the food to be provided for children in these two budgets are strikingly similar:

A quart of milk for each child each day;
 two vegetables besides potatoes each day;
 a leafy vegetable like greens, lettuce or cabbage, twice a week;
 two fruits a day, one fruit or vegetable raw;
 a whole grain cereal as bread or breakfast food each day;
 protein food, as meat, egg, fish, or cheese, each day.

The Wyoming plan does not give a detailed food budget. The South Dakota plan specifies in detail amounts and kinds of foods to be raised on the farm and to be purchased in order to give the specified family of five an adequate diet. The amounts of food provided for in the South Dakota budget have been analyzed as to their calorie, protein, calcium, phosphorus, and iron content and have been found to come up to the nutritional standards for a family of this type used by the United States Bureau of Home Economics. The publication of such an itemized plan for food consumption greatly increases the usefulness of a budget for a farm family. In the opinion of the Committee, the task of adapting the food plans suggested by this budget to the needs of families of different composition would be facilitated, if in addition to the family food budget, individual food budgets were prepared for persons of different nutritional requirements. If this were done, different families could combine the food plans which fitted the needs of their various members, with some assurance that they were planning for adequate diets.

Clothing. The clothing provisions for children in the South Dakota budget are distinctly more liberal than in the Wyoming plan. The money costs of the children's clothing budgets are as follows:

	<i>Wyoming</i>	<i>South Dakota</i>
Boy, 16 years old.....	\$77.15	
Boy, 12 years old.....	\$104.00
Girl, 16 years old.....	134.00
Girl, 8 years old.....	55.00	
Baby, 2 years old.....	30.55	51.50

These figures may be compared with the average practice of farm families in eleven different States as shown by a study made at the Bureau of Home Economics, United States Department of Agriculture, which is shortly to be published.

AVERAGE CLOTHING EXPENDITURES FOR FARM CHILDREN IN ELEVEN STATES,
1922-1924*

Boys, 15-17 years old.....	\$66.00
Boys, 12-14 years old.....	45.00
Girls, 15-17 years old.....	75.00
Girls, 6-8 years old.....	28.00
Children less than 3 years old.....	14.00

* From a study made at the Bureau of Home Economics, United States Department of Agriculture.

It is obvious from a comparison of these tables that the provisions for children's clothing in both the budgets under consideration cost more than was spent on the average by the farm families studied by the Bureau of Home Economics, 1922-1924. It might be that average farm incomes were higher in Wyoming and South Dakota in 1928 and 1930 than in many other States. The only comprehensive study of agricultural incomes by States shows that for 1919, 1920, and 1921 per capita farm income in Wyoming was considerably above average per capita farm income in the United States, and per capita farm income in South Dakota was considerably higher in 1919, somewhat higher in 1920, and somewhat lower in 1921.⁷

Since no studies of clothing for children in farm families have attempted to compare cost with adequacy, it is impossible to say whether the average practice of farm families furnishes adequate clothing or whether the larger expenditures recommended by these budgets are necessary, if the self-respect of farm children is to be maintained. The problem of measuring the factors involved is so difficult that an early solution of the question of proper clothing allowances is unlikely. In view of current American practices, the statement of the standards of the South Dakota Clothing Committee quoted in the following paragraphs sounds very reasonable. However, it is unfortunately true at the present time that the incomes of the majority of American farm

families are not large enough to warrant the expenditures recommended by the South Dakota Committee.

"The women of this committee felt that the standard of dress among the high school girls should be restricted. They also recommended that the girl of sixteen take advantage of her opportunity to acquire a knowledge of dressmaking. There being only two schools in Fall River County offering courses in home economics, the best chance for development in sewing would be 4-H Clubs.

"They recommended that the boy be allowed a suit every year. They believe that he would outgrow a suit before it could be of much use the second year. They believe that jackets of the same material as the overalls will save shirts a great deal while the boy is doing chores. They allow the boy two coats for two years—one being a coat to wear around home, and the other a dress coat.

"While the committee realizes that the expenditure of \$51.50 seems high for a two-year-old child, they have tried to estimate the costs according to the prices common in our stores.

"They have tried to estimate only the necessities of this child. They feel that a child of two in an average farm house, will need more and warmer clothes than the child in a furnace-heated home.

"The committee feels that a woman with three children, a garden, and chickens to care for, besides her regular household duties would not have a great deal of time to make over clothing. They feel that the two older children in average farm life would wear their clothes beyond the stage of made-overs."

Household Equipment. Both budgets point out the lack of running water, bathroom facilities, electricity for light and power in almost all the farm homes for which they plan. Both provide a sinking fund for the improvement of household equipment. House furnishings and equipment committees of both States stressed the importance of an adequate and convenient water supply as a means of safeguarding the health of the family and lightening the work of the homemaker. The absence of an adequately protected water supply and proper toilet facilities in rural districts constitutes a constant menace to the health of farm children.

Neither budget has any provision for special equipment for the growing children of the family.

Housing. Even for farm tenants, farm houses usually come with the farm and there is no provision for rent in

these budgets. A survey in South Dakota showed: 26 per cent of the houses having four rooms; 26 per cent having five rooms; and 21 per cent having more than six rooms.

In neither budget is provision made for enlarging the house, although such an enlargement is recommended for the future. The Wyoming budget adopted a "minimum standard" of housing for a farm family as follows:

"That a five-room house be the minimum standard of housing for a farm family, rooms to be divided as follows: three bedrooms, one for the parents, one for the boys, one for the girls; kitchen-dining room combination while the children are small, to save work for mother; and later a dining-room-living-room combination when children can assist at the work."

The South Dakota standard was expressed as follows:

"The standard set is one bedroom for every two members of the family and an additional one for hired help. For the average family of five this would mean four bedrooms."

Other Items in These Farm Budgets. The Wyoming budget does not give the details behind its provisions for expenditures for recreation, education, church, charity, health, insurance, and savings beyond saying that the expenditures are necessary for the purpose of providing "a satisfactory standard of living, education for children, and a minimum to be laid aside each year for savings, insurance, or reduction of mortgage."

The South Dakota budget is more specific. The analyses of reasons for the amounts allotted are given as follows:

Education. The committee was unanimous in that the children should receive the equivalent of a high school education.

"In comparing cost of boarding away from home and driving in to school by car it was found to be practically the same. The committee felt that, if possible, it is more desirable for the child to stay at home.

"It was felt also that every home should have some kind of musical instrument and that the children should take enough lessons so they can enjoy, appreciate, and provide music within the home circle; that there should be at least four magazines—one farm, one home, one general, and one children's magazine—and a daily and local news-

paper; that both adults and juniors should belong to some educational organization; that the radio is both educational and recreational and that the farm family should be able to have one. The committee considered \$201.20 necessary for the educational needs of the family.

"Recreation and Social. The discussion brought out that there were differences of opinions in regard to the amount of money needed and how it should be spent. The committee felt that the type of recreation that is wholesome and developing, requiring little expenditure of money, should be stressed.

"Church. The committee recommends that every family take part in the church life of the community and help to support it.

"Health. The committee recommends that more emphasis be put on preventive measures such as vaccinations, periodic dental and physical examinations. The amount recommended to be included in the budget is: \$60 for periodic physical and dental examinations, \$1 for vaccinations, and \$50 for minor illnesses and accidents, making a total of \$111.

"Personal. In regard to personal expenditures the committee suggests that a careful check be made to determine if adequate returns are received by the individual or the family group for money spent.

"Insurance. The committee recommends that one hundred dollars be invested in insurance.

"Total family budget. In submitting the budget, the committee wishes to recommend that the Fall River farm families study this budget in relation to their own family needs, and after making the necessary adaptations use it for the coming year. It is further recommended that farm families keep household accounts to get a check on this budget for further study."

It is evident that the committees making up both of these budgets had in mind the welfare of the children of the family in budgeting for a standard of living which will be used as a goal for the future by many farm families whose economic resources make it impossible for them at the present time to attain the standard here set up. It is clear that more exploratory work of this sort is needed in farm communities in all parts of the country, and that local committees could proceed much more efficiently if they were provided with the results of research into the cost of the total environment necessary for satisfactory child development in a certain type of community. (See page 117.)

COST OF ADEQUATE PROVISIONS FOR CHILDREN

THE MONEY COST OF BIRTH

All of the budgets available to the Committee are made up for the expenditures of completed families. In none of them is there any provision for meeting the costs incident to the birth of a child.

The money cost of the medical care necessary to safeguard mother and new-born child varies tremendously from place to place according to the hospital facilities available and the number of doctors in relation to the population. It has been shown in several studies made by the United States Children's Bureau that there is a close connection between poverty and infant mortality, but very few communities have done any work on the cost which is necessary, barring unusual complications, to protect the new-born infant and his mother.

Investigations made by the Metropolitan Life Insurance Company show that "the minimum average maternity cost, when care is given in the hospital ward, is around \$150. The estimate follows:

- \$50 for hospital expenses (the average amount charged in wards);
- 70 for home service (hiring a working housekeeper);
- 25 for the baby's layette;
- 5 for incidentals, such as hospital fees for prenatal care, the cost of which is very small, as only twenty-five cents is charged for each clinic visit.

"For a more adequate type of hospital service, a minimum figure will be in the neighborhood of \$250.

"Keeping the price of service, layette, and incidentals as before, the extra one hundred dollars will provide care in a semi-private hospital room instead of in a ward. There is a real difference in quality between these two types of service. In normal ward cases, delivery is given by senior internes under the direction of the house or visiting staff. In abnormal cases, the visiting physician does the actual work himself. In the semi-private rooms, on the other hand, service is given by one of the staff obstetricians. Semi-private patients need not attend the public prenatal clinics, but are entitled to private consultations with the staff doctor who is to attend them."⁸

An investigation of money costs at the time of birth was conducted in Columbus, Ohio, by Professor Mary Louise Mark with the assistance of some of her graduate students.

The 540 births for which costs were investigated cost on the average \$110—\$82, or three-fourths, being consumed by medical costs; \$23, or about 21 per cent, being spent for babies' outfits; and the remaining \$5, or 4 per cent, used in meeting miscellaneous expenses, chiefly extra household service.

"Not only are medical costs three times as great as all other costs combined, but they are also much less under the control of the family, because these needs of the mother and baby at the crisis of birth are less predictable than are other items. And yet in all three racial groups not only the amounts but the proportions spent for medical services tend to decrease with lowered economic status. The explanation lies in the fact that poor families skimp attention and doctors adjust fees.

"Only the well-to-do and the dependent in Columbus have medical care at childbirth approximating modern standards. The very poor and the lower range of those classified as intermediate have far from satisfactory care. Although ignorance and carelessness are contributing causes, the chief difficulty is lack of funds. The more intelligent of the parents in close circumstances are the chief sufferers because they are conscious of the risks involved for both mothers and babies. As long, however, as the present gap between the cost of standard services and the poor man's purse exists, just so long will mothers who will not accept charity choose the risks of slight care rather than the certainty of staggering bills." ⁹

In Berkeley, California, an investigation of the physical conditions surrounding maternity and infancy was started when Dr. Richard A. Bolt was assistant professor of child hygiene in the University of California, and is still being carried on in cooperation with the Institute of Child Welfare at the University of California.

"The relatively low maternal and infant mortality prevailing in Berkeley suggested at the outset the desirability of attempting to evaluate the complex social, economic, and public health factors contributing to this favorable situation. The intimate problems involved have therefore been approached from the standpoint of why so many mothers and babies live and thrive in Berkeley, rather than from that of maternal and infant mortality rates. So few mothers and babies

die each year as to impair the reliability of any exact statistical considerations of mortality rates. The method of sampling used in this study is based on a selection of every third birth in chronological sequence as registered at the Berkeley Health Department during the year 1928.

"A total of 390 obstetric cases forms the basis for the investigation. The data in 376 cases are sufficiently complete to permit a presentation of the total cost of obstetric service for that number.

"Of the total live births to Berkeley mothers during the year 1928, 83.51 per cent occurred in hospitals. This is a larger percentage than is known to occur in any other American city the size of Berkeley. The total cost of obstetric service to Berkeley mothers averaged \$213.75. In half the cases the charges were \$179.41 or less. Ten per cent (approximately) of the patients were not charged any physician's fee.

"If the average cost is calculated on the basis of all the cases (390), including patients who did not pay anything, it would be reduced to \$206.07. The cost, however, may run to \$1000, or even to \$1800 in exceptional cases, especially in those with complications."¹⁰

COST OF MEDICAL CARE

"The Committee on the Cost of Medical Care was organized in 1927 to make a five-year study of the aspects of the care and prevention of illness. The program of the committee includes surveys of existing medical needs and facilities, studies of expenditures for medical services and of returns received by physicians and others, and analyses of specially organized facilities. On the basis of the facts gathered, the committee hopes to formulate a series of recommendations which will point the way to the provision of adequate scientific medical care for all at a reasonable cost, which at the same time will assure sufficient income to physicians, dentists, nurses, and others concerned."

COST OF ADEQUATE DIETS

A scrutiny of the foregoing budgets as analyzed will make it evident that there has been more work done in determining the cost of adequate diets than in determining the adequacy of the provisions in any other section of the budget. Separate studies of the cost of adequate diets have been made by several different individuals. One of the most valuable of these studies was made in New York City in 1917 by H. C. Sherman and L. H. Gillett under the auspices of the Association for Improving the Condition of the

Poor.¹¹ Their report is to be supplemented very shortly by an analysis by P. B. Rice and L. H. Gillett of the adequacy and economy of some dietaries recorded in New York City in 1928.

Mary Swartz Rose's figures on the cost of urban diets of different types are very helpful in planning for adequacy.¹² A recent study of the cost of adequate diets for farm and village families has been published by New York State College of Home Economics in cooperation with the Cornell Agricultural Experiment Station.¹³

CALCULATIONS OF THE COST OF REARING A CHILD

In 1919 a report on the money cost of bringing up a child to the age of sixteen years in the United States, made by Professor W. F. Ogburn, was presented at the conference held at the Children's Bureau on *Standards of Child Welfare*. Professor Ogburn used figures on expenditures of wage-earning families collected by the Bureau of Labor Statistics in 1918. He found that:

"In rearing a child from birth to sixteen years of age, \$1,325 is, on the average, added to what the budgetary costs for food, clothing, rent, and so forth, would have been if there had been no child. This is the net increase in the total expenditures caused by bringing up the child. But the actual cost of what the child consumes is far more. We have seen that although the net increase of the budget for food and clothing is only \$985, the actual cost of the child's food and clothing is \$2,275.

"The difference between the increase in the family expenditures caused by the rearing of children and the actual cost of the food and clothing and other items consumed by them indicated the extent to which the general family standard is lowered by their presence. At bottom, it shows the self-denial of the father and mother."¹⁴

More recently L. I. Dublin and A. J. Lotka of the Metropolitan Life Insurance Company have adapted Ogburn's methods of calculation in computing the cost of bringing up a child to eighteen years of age (in a family where the father's maximum earnings are \$2,500) as \$7,425. When account is taken of the fact that "in order actually

to raise 87,182 children to age eighteen, the community must bear the cost of birth and partial rearing of a full complement of 100,000 children—the other 12,818 having died before reaching their eighteenth birthday”—and of interest on cost throughout the period, the cost to the community becomes \$10,485 for each child reaching eighteen years of age.¹⁵

“The cost of bringing up a child is, of course, greatly dependent upon the standards of living in the home in which it grows up. We are here primarily interested in the family of very moderate means, yet well beyond the line of actual want. In preparing computations for a representative case we have chosen the class in which the husband, at his best period in life (which is about the forty-third year of age) earns \$2,500 a year. A population consisting entirely of men of this class and having the age composition of the male population of the United States, and the percentage of employment actually observed at the several ages of life, would have an average income of about \$2,100 per annum for each employed male. This is probably a little above the actual average for all gainfully occupied males of the United States. But, speaking in round numbers, the maximum annual earnings of \$2,500 may be said to be representative of a large and socially fundamental contingent of our male population.”¹⁶

MONEY COST OF CHILDREN IN BUSINESS AND PROFESSIONAL FAMILIES

Mrs. Chase Going Woodhouse under the auspices of the United States Bureau of Home Economics has conducted a study of the money cost of children in business and professional families which is to be published during the coming year. She has records from 149 families with children, kept in such a way as to show direct expenses for each child for clothing, education, play equipment, paid care, health, allowances, and such items. Food costs were computed by calculating total energy requirements for each family and apportioning total food costs according to relative energy requirements. For operating, shelter, furniture, and equipment, one-sixth of the total cost was allotted to each child. Preliminary figures from this report show average expenditures for children at the lowest income level recorded by the group as follows:

AVERAGE ANNUAL EXPENDITURES FOR CHILDREN IN BUSINESS AND PROFESSIONAL FAMILIES WITH INCOMES FROM \$1,900 TO \$3,999 ¹⁷

	Children, 1-5 Years	Children, 6-14 Years
Direct costs.....	\$ 68.00	\$106.00
Expenditures for food.....	84.00	147.00
All direct and joint costs.....	292.00	393.00

Mrs. Woodhouse points out that the variations in expenditures for health and education seem to have very little to do with income. Expenditures for education for children under five years depend largely upon the presence of nursery schools in the community and membership in child study groups.

Range in health expenditures for children from one to five years was zero to \$2,425. The presence of zero even in the higher income families is a mute witness of the failure of even well-to-do parents to provide routine preventive health care for their young children. In many families these expenditures should be labeled disease instead of health.

In most communities the most fundamental problem faced by teachers dealing with matters of financial management is lack of scientific material on the money cost of a satisfactory home life in their own community, but there are other problems which also must be met.

Professor Ruth Wardall of the University of Illinois has contributed the following on the subject of teaching of better management of family finance.

TEACHING BETTER MANAGEMENT OF FAMILY FINANCES

By RUTH WARDALL, *University of Illinois*

General Problems in Teaching Budgeting

One of the great values of the budget lies in the sense of assurance and mastery which comes to the individual who knows his money income and recognizes that he is using it in a purposeful way to secure for himself the greatest

possible satisfaction that can come from his resources. The budget must be interpreted as a means to an end in securing satisfactions and as an aid to a solution of financial problems. The budget reveals to the man his habits of consumption and his own sense of values.

The first and the greatest problem in the teaching of budgeting is to arouse a sense of appreciation of the possible value of the budget and a willingness to keep records of family expenditures to serve as the basis for a budget. Those who attempt to teach the budget are thoroughly familiar with the traditional objection to the keeping of accounts of money expenditures, but the keeping of classified accounts over a period of three months frequently results in enough interest and appreciation to insure its continuance throughout the year. Help at the start and at intervals through the first year means much to one who is attempting to make a budget.

Another fundamental problem in the teaching of the budget is the need for securing the cooperation of all members of the family. There should be a recognition of the fact that a given money income may be expended in various ways with varying degrees of satisfaction to any family.

Definite percentages and figures, such as those in the so-called standard budgets, frequently start discussion and call out differences of opinion which serve to arouse an interest among students in the figures for their own families.

METHODS OF INSTRUCTION

1. Usual class methods of instruction in the schools may be used to present the purpose of accounts and the classification of expenditures for a good working budget.

2. Individual conference and consultation is a very valuable method of instruction. Such service is rendered to some extent by some banks and by a few stores.

3. The formation of study groups under an experienced leader has proved a most effective method of teaching budgeting.

4. A combination of group and individual instruction has many advantages.

5. Books and forms of various sorts have been devised for the keeping of accounts and these are an aid in many cases. The classification of expenditures should be on a rational basis and capable of ready interpretation and use. The American Home Economics Association has a committee working on family record and account forms with the expectation that a fundamental classification of expenditures may result in an account book which will be uniformly used and enable a quick comparison of data secured in widely separated portions of the country.

Methods three and four are being very successfully used in home economics extension service in some States.

Whether the individual or group method of instruction is used, an effort should be made to have periodic conferences to carry the process beyond the first enthusiasm and to put the accounts and the budget on a good working basis.

Classes in home management in many colleges and in some high schools give instruction in the keeping of individual and family accounts and in the organization of a budget. The efforts of some schools to encourage the establishment of savings accounts among the students tend to encourage a purposeful use of money.

The Home Economics Extension Service of the Land-Grant Colleges has made a very valuable contribution to the study of the family income and its use in a number of States. The Extension Service is not only encouraging the individual family to keep accounts and to study expenditures, but it is leading to a clearer understanding and calculation of the total income and outgo for the farm and the farm home.

Social agencies engaged in the relief of dependent families have furnished information bearing on minimum requirements for dependent families and those of very low income.

The Young Women's Christian Association and other organizations for women occasionally conduct classes for the study of the budget for the young girl and the unmarried woman.

Many banks offer account books for the single man and

woman and for the family. Some banks offer consultation service in the making and keeping of the budget.

How should parents provide for the economic education of their children, as they plan the distribution of their family finances? Dr. Benjamin Andrews, Professor of Household Economics at Teachers College, New York City, contributes the following on the operation of allowances for children.

MONEY IN PARENT-CHILD RELATIONSHIPS

By BENJAMIN ANDREWS, PH.D., *Teachers College,
Columbia University*

The Home in the Economic Education of the Child

The economic education of the child is his directed experience, at home and school, with the financial and business problems that come naturally into his life so that he may meet such situations successfully as a child and later as an adult. The adult's money activities include earning, spending, saving, investing, borrowing, lending, and giving money; and the child may wisely experience money in every one of these ways while still a child and youth, under parental counseling, and often in joint experiences with parents. With this as with other home-directed education, "living with one's children," giving them opportunity to make their own plans and decisions, to make mistakes where mistakes are not serious, and encouraging them to talk over their problems with their parents, seems the ideal method. Briefly put, a money allowance at home with varied financial experiences along the way as the child grows up, and at school, a school bank, with much more of definite instruction and business experience in the curriculum than is now usual, constitutes a desirable program of economic education. In this paper, the home's part in such an education is discussed.

How do children learn "the uses of money"? A few exploratory questions were put to 634 children in the schools of two cities, asking them whether they were receiving allowances from their parents, and what they would do with an allowance if they received one, and whether they had experience in earning money.

In Rochester, New York, answers were given by 184 girls in grades six to ten, and 108 boys in grades six to nine. In Brookline, Massachusetts, answers were given by 192 girls in grades five, six, seven, and eight, and 150 boys in the same grades. Brookline has an unusual program of so-called "economic education," with instruction in personal budgeting accounts.

Of the 634 pupils in the two cities:

57 per cent had allowances;

40 per cent reported that they had money only when they asked for it;

39 per cent of 292 pupils in Rochester had allowances.

71 per cent of 342 pupils in Brookline had allowances.

Girls had allowances more often than boys.

42 per cent of the girls in Rochester had allowances, but only 28 per cent of the boys.

77 per cent of the girls in Brookline had allowances, but only 65 per cent of the boys.

The pupils were asked what allowance they would like to have their parents give them. The allowance desired by boys and by girls, respectively, in the individual grades, varied from a low median of fifty cents for a sixth grade of boys in Rochester to a high median of five dollars for an eighth grade of girls in Brookline, with a median of three dollars for a tenth grade of girls in Rochester.

With the exception of these three groups, the median allowances desired in the different grades varied from seventy-five cents to two dollars a week.

The desired allowance increases with age. In Rochester the median desired by girls increased from one dollar in the sixth grade to two dollars in eighth and ninth grades, and three dollars in the tenth grade, while two dollars was desired by boys in the tenth grade.

In Brookline the median ranged from seventy-five cents to one dollar in the fifth and sixth grades, to about \$1.25 in the seventh grades, and \$1.75 to \$2 in the eighth grades.

These figures gave a crude index to the allowances desired by city children—from fifty cents to one dollar at fifth

and sixth-grade ages, to two dollars at eighth and ninth-grade.

Do boys, or girls, feel the need of a higher allowance? In eleven comparisons of boys and girls in the same school building and grade, the evidence is not clear. In six cases the girls desired a higher allowance; in two, the same; and in three, a lower allowance than the boys.

"If you had one dollar a week to use exactly as you pleased for the next year, what would you do with it"? In Rochester, 208 of 292 children suggested using part of allowance for saving, 214 for spending, and only 5 for church or charity as representing the "giving" item.

From Brookline, 317 of 342 replies suggested definite allowance for saving, 279 for spending for "needs" and "wishes," and 246 for giving.

In Brookline, the relative pull of different motives in money use—doubtless affected by education—appeared rather clearly, the younger children tending to over-save and to over-give, while with increasing age the three functions of saving, giving, and spending tended to balance one another about as adult judgment would approve. Thus, in a fifth grade, 50 per cent saving was the median suggested by the girls, 45 per cent by the boys. In the eighth grade of same building this decreased to 15 per cent for girls and 10 per cent for boys.

In another school in a sixth grade 35 per cent saving was the median suggested by girls, 40 per cent by boys. This decreased to 20 per cent for boys and girls alike in eighth grade.

In two other buildings, 20 to 25 per cent was the amount suggested for saving in seventh and eighth grades.

In the Brookline budgets, "giving" was assigned a median of 10 per cent in all eighth grades, boys and girls alike, but ranged higher in four out of six of the fifth and sixth grade groups.

In upper grades of Brookline, present "needs" and "wishes" (money used for oneself other than saving and giving) were allotted a larger share in the dollar allowance

than in lower grades; in one building increasing from lower grades to higher, from 40 per cent to 80 per cent for girls, and from 25 per cent to 70 per cent for boys; in another building from 45 per cent to 70 per cent for girls, and from 50 per cent to 65 per cent for boys.

In Brookline the average budget for eighth grade children was 70 per cent for spending, 20 per cent for saving, and 10 per cent for giving.

That the estimates had been affected by education is strikingly indicated by the "giving" item appearing in 77 per cent of budgets in the city providing economic education, and in less than 2 per cent of budgets in the other city.

The American Bankers Association reports that the school savings in 1928-1929 was operating in some form in 15,597 schools and reaching 4,222,935 pupils.

School savings evidently would become the basis of a national program of economic education, if there were developed paralleled curriculum material and activities in the school, with which the home might also cooperate, to give knowledge and practice in the whole range of money experience.

In a sampling of fifty-one representative junior high schools in forty-one States, canvassed by Mr. R. W. Gingrich in 1930, twenty had a school bank, but only three had a course in thrift education, while six had thrift taught as a topic in some course.

Of sixty-six representative senior high schools in forty-six States, three had a school bank, four had a course in thrift, and nine included a thrift topic in some course.

Of 580 pupils in seventh, eighth, ninth, and twelfth grades in a New York City suburb, canvassed as to the source of their school bank deposits, if any, 45 per cent of those depositing were earning their deposit money wholly or in part, 24 per cent had a regular allowance from parents, part of which they were saving, and 30 per cent had the amount of their school bank deposit given them for this special purpose by their parents.

Of those saving, 48 per cent had "a definite purpose, such as college," 16 per cent reported that they "had kept

personal accounts," although not all were keeping them at the time of reporting.

In an industrial arts school near New York, 1930, of fifty-three girls, fourteen to seventeen years of age in seventh to tenth grades, largely of foreign parentage, and not yet working, one-half had a regular weekly allowance varying from twenty-five cents to ten dollars a week, one dollar being the median.

The money practices of a group of adults may throw light on ways of establishing sound habits of finance in children. In a sample of thirty-six women teachers of home economics, coming from twenty different States, nine had received allowances in childhood and twenty-one had savings accounts as children.

Most of the thirty who reported on the subject place their first recollection of spending money at four, five, and six years of age with five cents as the median of the first expenditures.

The first significant ownership experience was placed from three to twenty-one years of age with the median time at six years.

The first earning experience of these individuals was placed from six to twenty-two years of age with the median at eleven years.

There were eighteen different methods of initial earning mentioned, of which the most numerous were eight, teaching, and five, housework.

Of the thirty-six persons, three had never kept accounts of expenditures, ten had done so regularly, seventeen had done so occasionally, and ten had written records of property.

In this group, twenty-three were saving regularly, setting saving aside as the first charge on income, and twenty-eight were using an active savings account, while twenty-three were budgeting or planning their clothing expenditures systematically.

Children's Allowances

The allowance is immediately practical, meeting chil-

dren's real needs for small sums of money; rightly handled, it has also great educational possibilities.

The allowance is best given at a regular time, weekly, but with older children it may be given monthly or, with a clothing budget or college student's expense, may be planned on a yearly basis.

The allowance is not given as a wage for housework and other tasks performed; rather it is the child's rightful share in the family's money income. In the home, young and old freely contribute services to the home enterprise, and both should share freely in the home's money resources. The allowance is also not to be given or withheld as a part of a system of rewards and punishments, for grades in schools, or for other conduct.

Who determines how much the allowance shall be? Parent and child, analyzing together the child's money needs, bring out the determining factors, namely, the family's limited income, the needs of others as well as oneself, and the family's future as well as present needs.

The allowance may well be begun as soon as money is recognized as the medium used in buying; the three-penny formula, "one to spend, one to save for something needed later, and one to give," has been begun successfully at four or five years of age. The allowance is increased as needs increase, and its revision is itself an educational experience for all concerned.

Children should be encouraged to keep written accounts of spending, but the allowance should not be dependent on so doing. A mental alertness and habit of weighing values is more important than simply writing down what is spent. Budgets and plans, which may be mental as well as written, are the important items, and accounts are important when they contribute to planning.

Financial fair play between parents and children, and between the children themselves, especially between older and younger, and between brothers and sisters, should be a goal sought in economic education. While in the family one helps another gladly, and often quite properly without return being expected, yet one person is not to be exploited

for another because they are relatives; where advances or family loans have been made, they are to be returned as in outside business undertakings.

To summarize, the child as a developing personality needs financial freedom with friendly, companionable guidance from elders; this the modern, democratic, mutual-aid family is competent to furnish. The child by his allowance is given opportunity to learn through experience; but an allowance does not work automatically, it requires counseling and guidance. With it available, and with parents interested to keep in personal contact with their child's financial problems, he will, with their cooperation, find his way while yet a child and a youth into experiences of earning, spending, giving, saving, and investing money, that will equip him with the knowledge, skill, and attitudes necessary for a wholesome and successful financial experience as an adult.

Special Problems in Parent Education

It is obvious that the five investigations of living costs recommended at the end of this report cannot be made in every situation in which parent education on the subject of the management of family finances should be carried on. It will be necessary for many teachers and social workers to adapt figures compiled for districts similar to their own to the needs of the parents of their particular communities.

This task is the more difficult because of the low incomes of families in many communities.

Problems of Families with Very Low Incomes. The most recent figures on the individual incomes of all groups of people in the United States apply to the year 1927, an unusually prosperous year in industry. At that time, according to preliminary estimates of W. I. King of the National Bureau of Economic Research, the average annual income of the people of the United States amounted to \$748 per capita, and to \$1,928 for each person "gainfully occupied."¹⁸

According to King's very carefully calculated estimates there were about 45,373,000 "gainfully occupied" persons in that year, of whom 27,298,000 were wage-workers and 6,124,000 farmers. Together these two groups make up

73 per cent of the "gainfully occupied" persons in the country. The average income of the wage-workers in that year was \$1,205; of farmers, \$1,006. The latter figure represents the average cash income of farmers plus the money value of fuel and food procured by the family from the farm, and the estimated rental value of farm houses. The average cash income of American farm families in that year was probably about \$750. Obviously, if the average income of wage-workers was \$1,205, many received sums somewhat below this figure; many, sums somewhat larger. The following table giving figures on earning from wages in different industries as well as figures on salaries shows how closely the average earnings of wage-workers in different industries approximate \$1,200.

AVERAGE INCOMES OF INDIVIDUALS OF DIFFERENT ECONOMIC STATUS IN THE UNITED STATES IN 1927—AS ESTIMATED BY W. I. KING OF THE NATIONAL BUREAU OF ECONOMIC RESEARCH

	Number in Each Group	Average Income
Wage workers.....	27,298,000*	\$1,205†
Attached to:		
Agriculture.....	2,276,000*	533‡
Manufacturing.....	9,100,000*	1,216†
Mines, quarries and oil wells.....	1,215,000*	1,224†
Construction.....	1,421,000*	1,644†
Mercantile.....	3,852,000*	1,262†
Transportation.....	2,540,000*	1,436†
Unclassified.....	6,893,000*	1,202†
Salaried employees.....	8,274,000§	2,084
Attached to:		
Agriculture.....	32,000§	1,242
Manufacturing.....	1,498,000§	2,470
Mines, quarries and oil wells.....	70,000§	2,454
Construction.....	142,000§	2,129
Banking.....	288,000§	2,259
Mercantile.....	771,000§	1,844
Government.....	2,819,000§	1,771
Transportation.....	763,000§	2,028
Unclassified.....	1,892,000§	2,339
Farmers.....	6,124,000¶	1,006¶

* King, W. I. *The National Income and Its Purchasing Power*. New York, 1930, pp. 56-57.

† The same as (*), pp. 146-147.

‡ Includes estimated money value of room and board.

§ The same as (*), p. 60.

¶ The same as (*), p. 308. The income figure does not include changes in property values during the year, but does include value of food and fuel furnished by the farm and imputed rent of owned homes.

|| The same as (*), p. 158.

These figures are a striking comment on the inadequacy

(from the point of view of parent education in the management of family finances) of budgets for the expenditure of \$1,600 to \$2,000 for a family of father, mother, and three children in school, the father being the only person in the family "gainfully occupied," the mother devoting her time to care of the children and household production. The majority of American families are not facing that kind of an economic situation even in prosperous years like 1927.

In addition to budgets for families of this composition at these income levels, it will be necessary, until large numbers of wage-earners and farmers are receiving larger incomes, for teachers of this subject to have budgets which will assist families of different composition to make the best possible use of incomes of about twelve hundred dollars a year, or to make the adjustment necessary for the welfare of the children when the mother supplements the father's earnings by working outside the home.

The variation in the cash incomes of white farm families, who own and operate their own farms, has been computed by Mr. Eugene Merritt of the Extension Service of the United States Department of Agriculture on the basis of figures from the Bureau of Agricultural Economics. Mr. Merritt's figures show that even on the West Coast where farm incomes are larger than in any other district, only 34 per cent of white land-owning farm families receive cash incomes large enough to procure the living standards outlined in the budgets quoted on page 103.

Mr. Merritt's figures are as follows:

CASH AVAILABLE FOR FARM FAMILY LIVING
(12,000 WHITE OWNER OPERATORS), 1928

	<i>North Atlantic</i>	<i>South Atlantic</i>	<i>South Central</i>	<i>East North Central</i>	<i>West North Central</i>	<i>Western</i>
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
\$2,500 plus.....	7	3	6	6	17	20
2,100-2,500.....	4	2	3	4	6	5
1,600-2,100.....	6	2	5	7	8	9
1,200-1,600.....	11	6	8	11	13	13
800-1,200.....	15	11	14	17	18	15
400- 800.....	22	24	25	25	18	17
400 or less.....	35	53	39	30	19	22

No figures are available to the Committee on the subject of the cash incomes of Negro families owning their own farms. The average cash income of both white and Negro tenant families would undoubtedly be less than for the owner families. These figures further emphasize the obligation which rests upon students of family economics to provide teachers of household management with material which will assist parents in the lower income groups to spend what money they have as wisely as possible for themselves and their children.

Families Lacking Public Provisions for Child Health and Recreation. The importance of carefully adapting budgets prepared in the interests of child health and protection to the particular situation in which they are to be applied is further increased by the uneven geographic distribution of community facilities established in the interest of child health and recreation. Free prenatal clinics, baby clinics, and milk stations, public playgrounds, boys' and girls' clubs with well trained leaders supported at the public expense are to be found in some communities and are completely lacking in others. In communities where such services are provided for children at the public expense, there is no need to make provision for them in the budgets of families with very small cash resources; in communities where these are lacking, some attempt must be made to rearrange family expenditures in such a way that the equivalent of these services, provided free or at slight expense in many American communities, may, if possible, be purchased for the children in the families for whom budgets are being planned. Unfortunately, it is frequently in the sections of the country where there are large numbers of families with very low incomes that such community facilities are lacking. In these communities it must be admitted frankly that the individual parents are powerless to provide adequately for the health and protection of their children.

The problems involved in remedying the evils resulting from child labor are in part educational, as well as social and economic. In some families incomes are so low that

it is impossible to keep children in school after the legal age limit has been reached. In other families, with small but somewhat larger incomes, children might be kept at school and out of industry as a result of better financial management and better understanding of the kinds of labor which are unfortunate in their effects upon the health and vocational prospects of the child.

GROUPS WHERE MANY CHILDREN UNDER SIXTEEN YEARS OF AGE HAVE LEFT SCHOOL AND GONE TO WORK

By GLENN STEELE, *United States Children's Bureau*

Minimum standards for children entering employment call for at least nine months' school attendance in each year for all children between seven and sixteen years of age.¹⁹ Yet our closest national estimate points to a million children, ten to fifteen years of age, at work and away from school.

The results of the 1930 Census, which will bring up to date the national count on numbers employed, are not yet available. In the United States in 1920, the census enumerators reported 1,060,858 children, ten to fifteen years of age, inclusive, engaged in gainful occupations. This number represented 8.5 per cent of all children in the continental United States in the age group under discussion.

In its analysis of the 1920 figures on children at work, the Census Bureau states:

"It is evident that the need for children engaging in gainful occupations is measured by the economic condition and the standard of living of the families to which they belong. Prosperous and well-to-do families, who are able to maintain their standard of living without the income from the labor of their young children, feel no necessity for putting the children to work, and hence, usually keep them at school. Among the poorer classes, however, the adult workers of a family sometimes find it difficult to provide even a meager living for the entire family, and feel a real need of the income from the labor of the young children. In such cases there will be a tendency to take the children from school and put them to work in order that they may contribute to the family income."²⁰

As the 1920 Census was taken in January, children employed only during the summer vacations on farms or at other seasonal work were not counted as employed, nor were children included who worked for their parents at home merely on general household work, on chores, or at odd times on other work.

Although the number of children engaged in agricultural pursuits was considered somewhat understated by the Winter Census of 1920, farm labor accounted for 60 per cent of the total employment of children, aged ten to fifteen, inclusive.

In discussing inadequate income as a causal factor of child labor, it seems advisable to consider separately the agricultural group and the group of youthful workers in other employment. The approach to the problem is necessarily somewhat different in town and country, not only because of the dissimilarity in farm and factory or other work for children, but because the system of financing for the farm family and that of the family of the wage-earner are so unlike.

In its publication, *Child Labor—Facts and Figures*, the United States Children's Bureau states:

"Economic necessity is an important factor in the employment of children on the home farm. The work of children on the farm is very generally regarded as a necessity, especially in the case of crops requiring much hand labor, inasmuch as farm labor is costly and farmers as a rule have little ready money. Although farm work does not usually oblige children to leave school at an early age, it is responsible both for irregular school attendance, and for shortening of the school term in rural districts."

The extent to which family need sends the boy or girl into mine, mill, store, domestic service, or other non-agricultural occupation, is not shown so clearly. There were 413,549 children, aged ten to fifteen, inclusive, engaged in such pursuits in 1920.

Children themselves have given some evidence as to their reasons for leaving school and going to work. This evidence, however, is limited, coming from small groups of employed children interviewed in special studies.

"The reports of these investigations made in various localities," says the Children's Bureau, "show that many children entering industry at an early age do so because of personal or family necessity."

"Many children go to work because their earnings are desired to raise the level of personal or family subsistence, although not absolutely necessary for support."²¹

In recent years various budgets have been set up to show the amount of money, per annum, essential for the minimum needs of the wage-earner's family. For comparison with these, we have the results of surveys, showing actual earnings for groups of wage-earning men throughout the country. As shown above, the Committee finds that the actual earnings frequently fall short of the amounts estimated as necessary. As a result, the standard of living falls below the normal minimum, and the children may be driven into industry in an attempt to bridge the gap.

One of the reports of the Committee on Vocational Guidance and Child Labor of the White House Conference on Child Health and Protection,²² analyzing surveys of employed children made by various agencies, shows that although generally speaking no more employed children than others are fatherless, low wages and unemployment of the father are factors in the situation. The report states:

"In general, poverty in the homes of young workers appears to be rather a question of low wages and unemployment than of widowed mothers. A large majority of the fathers of children who work are unskilled laborers or semi-skilled factory operatives. A comparison of such workers' wages with budget costs leads to the conclusion that large proportions of workers must be unable to maintain even a minimum standard of comfort and decency on the wages they receive, and that wives or children, or both, must add to the income if the family is to live."

FAMILIES WHERE THE MOTHER WORKS AWAY FROM HOME

The Census of 1920 showed that 1,920,281 married women were "gainfully employed." Preliminary estimates as to the number so occupied in 1930 are not yet available. How many of all these women have children under eighteen years of age is not recorded, but the report of the Women's

Bureau on *The Family Status of Bread-winning Women* in four selected cities, based on census figures, throws some light on the matter. It shows that of all the married women breadwinners in Jacksonville, Florida, Wilkes-Barre and Hanover Township, Pennsylvania, Butte, Montana, and Passaic, New Jersey, in 1920, 53 per cent had children, and 40 per cent of these mothers had babies less than five years old. Two-fifths of these mothers were working outside their own houses, the percentage varying from 54 per cent in Passaic to 29 per cent in Wilkes-Barre and Hanover Township. Thirty-seven per cent of the "gainfully employed" mothers who had children under five years of age, were working outside the home.²³

The Children's Bureau is just now completing an intensive study of the children of working mothers in Philadelphia, which will throw further light on the situation of such children.

It is obvious that if the health of the mother or the care of the children is not to suffer, the money expenditures of a family of a given composition must be larger when the mother is gainfully employed than when she devotes her working energies to the care of her family. It is also obvious that the distribution of expenditures among different items in the budget will be different in her family from that provided for in the budget of the "average family of five." There is, however, no satisfactory material available to the teacher of family economics on the amount of income needed to replace the mother's daily services in the home, for families with different standards of living; nor any material on satisfactory methods of distributing expenditures when the mother is gainfully employed.

BUDGET PROBLEMS IN RELATION TO CHILD WELFARE

It is evident that there is an immediate need for research on the subject of family finances in relation to child health and protection. The Committee wishes to stress the obligation that rests upon parents for long-time planning of family expenditures from the point of view of the welfare of their

children. It should be the task of the research workers and educators in this field to prepare and to popularize figures which will present to the public the money cost, in different situations, of the kinds of physical and social environment which have been shown by recent research to make for healthful development in children.

RECOMMENDATIONS FOR RESEARCH

The Committee recommends that research on this subject proceed in the following five different directions:

1. Money cost of established standards for child welfare.
2. Variations in child welfare among families with moderate incomes.
3. Special problems of budgeting for large families.
4. The management of family finances and child labor.
5. Management of finances when the mother works away from home.

1. The minimum requirements for food, clothing, housing, education, recreation, and health for children of different ages, recommended by the sub-committees reporting to the White House Conference, should be priced by experts in the money problems of the family in order to determine their cost for families of different sizes, in different situations both urban and rural, throughout the United States. Such research will establish for the benefit of parents, teachers, employers, and legislators the money cost under varying circumstances of the physical and educational standards submitted to this Conference.

2. Because of the fact that there is lack of definite knowledge as to all the conditions of satisfactory child development, it is further recommended that the physical and mental development of a large number of children in several different moderate-income groups be studied in relation to the expenditures of their families, to learn from actual family experience the economic and social background of well

developed as compared with that of poorly developed children. Such a study would require the cooperation of dietitians, doctors, and psychologists, as well as of experts in the economic problems of the family. It should be continued over a period of years and should cover a large number of cases. A study of this kind, recording the physical and mental development of children in moderate income communities as that development is related to the economic situation of their families, would furnish another way of discovering, if this is possible, the border line of income and education below which it is exceedingly difficult for parents to rear children satisfactorily. It should also assist in defining the methods of managing family finances at different income levels which are most conducive to child health. The information to be gathered from each family would include data on family income, family expenditures, goods and services received by the family without money payment, housing arrangements, economic history, health history, saving and investments, education of each member of the family, and physical and psychological measurements of the children. Information on income and expenditures should be gathered by the schedule method supplemented by accounts.

3. It has been pointed out that the typical family budget provides for the financial arrangements of the family of five. While it may be true that families of five are more numerous than those of any other size in the United States, it is also true that there is a large number of families of different size, some larger, some smaller. While it may be a relatively easy and pleasant process to adapt a budget planned for a family of five at a given income level to the needs of a family of four or three, the problems involved in adapting the same budget to the needs of the family of six, seven, or eight are extremely difficult to solve. There are disturbing evidences that children from large families do not have as many advantages as children from small families. For instance, studies of the size of the families from which college students come show them as coming from relatively small families. The author of one such study observes, "A

large family often makes it more difficult to give children educational advantages that might be afforded if there were fewer children to provide for." ²⁴

It is recommended that information should be gathered from families of six or more, in country and city, similar to that outlined above under project: *Variations in Child Welfare Among Families with Moderate Incomes*. Such a study may show that if children from large families in certain income groups are to secure an equal chance they must have assistance from agencies outside the family.

4. It is also recommended that the inter-relationships between management of family finances and child labor be investigated by comparing income management in two different groups of families. Families in both groups should be about the same size, and should each have about the same amount of income from the father of the family. All families should include at least one child eighteen years of age; but one group should be composed of families where the children have left school to add to the family income, and the other of families where at least one child has remained in school until he was eighteen years old, and none of the children has left school before the age of eighteen. The information to be gathered would be similar to that proposed in connection with the project: *The Special Problems of Budgeting for Large Families*. Research of this type should increase the information available in regard to economic necessity as a cause of child labor. It should further provide much needed data on how child labor might be prevented in certain income groups by wiser financial management.

5. It is finally recommended that a study be made of the financial arrangements necessary for the protection of the health of both children and mother when the mother works outside the home in factory, at clerical, or professional work, and her preschool children are being cared for in a nursery school where the mental development as well as the physical care of the children is receiving proper attention, and her

older children are having after-school play and work under proper conditions. Here again, as in the second general investigation recommended above, doctors and psychologists should cooperate with economists in order to ascertain not only the arrangement of family expenditures, but the physical and mental situation of the children whose mothers are working outside their homes, and the children's care is partly borne by agencies outside the home.

CONCLUSION

An important part of the research in family economics to be undertaken in the near future should be concerned with the money cost of an adequate standard of living, and money measurements should be accompanied by physical and mental measurements wherever such a combination is practicable.

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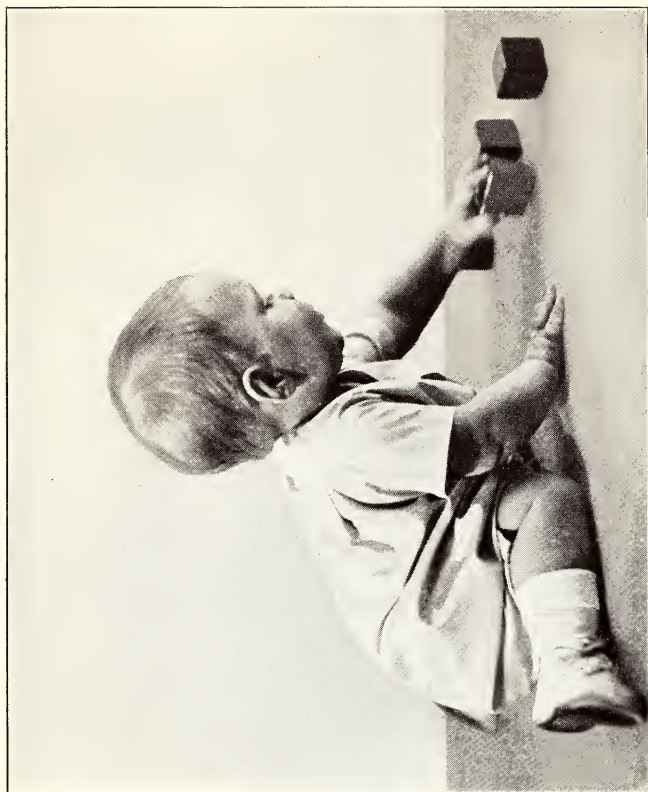
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CHILDREN'S CLOTHING



Courtesy of U. S. Bureau of Home Economics.

ACTIVE, EARLY CHILDHOOD REQUIRES CLOTHING SPECIALLY
DESIGNED TO ALLOW FREEDOM.

CHILDREN'S CLOTHING

HEALTHFULNESS, both from a physiological and psychological standpoint, should be the first criterion of children's clothing. Unfortunately, up to the present time this phase of the clothing problem has received far too little attention either in research or in industry. Style has controlled the selection of clothing for children as well as for adults, and often much more injuriously for children. The increased interest in child training and development during the past few years is tending to shift attention somewhat toward the hygienic aspects of children's clothing, but the lack of scientific data upon which recommendations can be based has seriously hampered any attempts to improve the practices of the general public.

It is common knowledge deduced from experience that clothing affects comfort, health, and energy, but only the most empirical information on the subject is available. At present there are no experimentally determined data concerning the amount and kinds of clothing desirable for children of different ages under varying conditions of temperature and climate. A recent complete summary of all publications in French, German, and English, dealing with any phase of clothing in relation to health, resulted in a bibliography¹⁰ * of only one thousand references and most of these were popular or pseudo-scientific articles which presented opinions, and not scientifically determined facts.

The effect of different fabrics and clothing designs upon physiological development and activity, the psychological effects of standards of adequate clothing, and what permanent injuries may be caused by improper clothing are still matters of conjecture, based not upon controlled experiments but upon isolated, individual observations. Very little scien-

* Numbers refer to literature cited at close of this chapter.

tific study has been given to the hygienic aspects of fabrics from a physical standpoint. The work of Rubner ¹¹⁻²⁶ in the latter part of the Nineteenth Century, and a few studies ^{3, 28, 33} made by recent investigators comprise almost the entire scientific contributions to this phase of the subject.

The psychological effect of clothing upon the wearer and its influence on his social adjustment are very evident ^{2, 4} yet no controlled study on this phase of the subject has ever been made. Some attention has been given recently to the development of so-called self-help garments with fastenings of a type and so placed that the child can manipulate them without adult help.^{30, 31, 32, 36} These undoubtedly have educational value, but so little is known concerning the manipulative ability of children in different stages of mental and physical growth that no adequate psychological correlations have yet been effected.³⁷

PROBLEMS INVOLVED

PRENATAL PERIOD

Most clothing problems are common throughout childhood and adult life. Some, however, become acute in certain stages of developmental growth and may well be considered as they arise in these different periods.

Maternity clothing has never been adequately studied. During the period of maternity it is essential to the health of the child and the mother that the garments be comfortable, easily adjustable, and pleasing in appearance. Psychologically, clothing is equally important in helping the mother to maintain during pregnancy normal social attitudes and relationships, both with the family and with the outside world. Neither of these problems has been investigated.

The designing of maternity garments continues to be an incidental part of the work of pattern and garment-makers. The question of which types of supporting corsets, brassières, and other undergarments are desirable is still merely a matter of opinion. Medical literature rarely mentions the subject, while the advice given by physicians to expectant mothers on these matters is often biased, since they have



Courtesy of U. S. Bureau of Home Economics.



Courtesy of U. S. Bureau of Home Economics.

COMFORT AND CONVENIENCE ARE THE CHIEF ESSENTIALS OF SUN SUITS FOR HOT WEATHER PLAY.

had little opportunity to give adequate attention to the matter and must rely on personal opinion formed from their own practices.

Physiological and psychological investigations are greatly needed in order to determine the correct standards of clothing for pregnant women. Agencies allied with obstetrical clinics might well cooperate with clothing designers in such research. When facts are available, the present clinical, child welfare, and extension agencies can readily disseminate the information.

PERIOD OF INFANCY (BIRTH TO SIX MONTHS)

In this period, adequate clothing is protective and comfortable and yet allows a maximum opportunity for the child's rapid growth. The lack of information as to what constitutes adequate clothing has given rise to many clothing fads both within and without the medical profession, the influence of which is seen particularly in connection with clothing for infants. These fads range from those which advocate almost no clothing to those which overload the infant with garments. From time to time, invented and patented garments appear on the market. Most of these are distinguished by their ingenuity rather than by their practicability.

Accurate research in this field would no doubt show that it is possible to set up clothing standards in both fabrics and designs which would insure adequate clothing for normal infants under specific temperature and climatic conditions. From the standpoint of design, it should be possible to develop clothing which would insure efficient care with a minimum handling of the child. From that of fabric, such investigations should produce materials lighter in weight, less irritating to the skin, and more easily kept in a sanitary condition than fabrics now available for this purpose.

PERIOD OF EARLY CHILDHOOD (SIX MONTHS TO SIX YEARS)

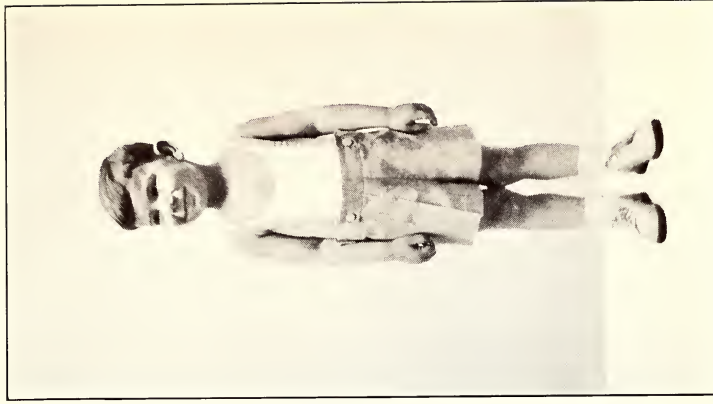
The first months following infancy are marked by the beginning of independent locomotion and most of the activi-

ties throughout the period of early childhood consist in perfecting this. The weight and design of the clothing should in no way hinder this development. As activity increases, temperature regulation also becomes an important function of clothing.

These considerations involve some of the first conflicts between the conventional and the health aspects of clothing. Shoes,⁶ trouser and hose supporters, underwaists and heavy coats, of great physiological importance wherever they affect the posture of the body, are first used during this period. Through the mother's devotion to misguided style features, the child may be unduly restricted and weighed down by the heavy and ill-fitting outer garments in which he is clothed for out-door play.⁵ Or, on the other hand, through her over-obedience to the dictates of fashion, he may suffer from inadequate clothing provided for "dress-up" occasions. Durable, well-constructed garments and sturdy fabrics of light weight are essential for children of this age; and in this respect much can be done to improve the types of textile materials now available.

The psychological and educational aspects of suitable clothing are also of predominant importance in these early years. Pride of possession and a feeling of independence are noticeable characteristics of young children. During this period, clothes consciousness comes into evidence and the first opportunities arise to develop good taste in dress, and to establish personal habits of cleanliness and careful grooming. Imitative tendencies become apparent. If the child's clothing is not in accord with that worn by his playmates a sense of inferiority may develop which is carried on to adult years; and emotional upsets are sometimes traceable to clothes that are uncomfortable, or difficult to manage. If openings are properly placed and appropriate kinds and sizes of fastenings provided, the child may learn to dress and undress himself, and his manipulative skill is improved by the practice he gains in using the small muscles of fingers and wrists in this process.

Garment design, therefore, should be planned with all



Courtesy of U. S. Bureau of Home Economics.

NEW DESIGNS IN BOYS' SUITS PROVIDE COMFORT AND CONVENIENCE.

these considerations in mind. Unfortunately, practically nothing is known concerning the fundamental character of these psychological reactions, so that at present a consideration of them enters not at all into child training.

In this period the problems involved in obtaining correct garment sizes first appear. The rapid growth of the child's body and the application of adult standards of fitting often result in garments that are unduly restrictive. The marked trend toward ready-made clothing and the fact that no exact data on body measurements are available has exaggerated this evil. One of the greatest needs in this connection is a system of garment sizes based on scientifically determined measurements of children of different chronological and physiological ages,⁹ with due recognition of differences in build. It is especially unfortunate that physiologists and clothing designers have never coordinated their efforts and developed garments at once hygienically correct and artistic.

PERIOD OF LATER CHILDHOOD (SIX TO TWELVE YEARS)

This age brings more diversified activity and more group spirit, necessitating sturdy fabrics and greater diversity of clothing. Children wish to be dressed like their playmates. There is little desire for individuality. Radical differences appear between boys' and girls' clothing.¹ Boys' garments follow the traditional lines of masculine clothing with its complicated construction, excess weight, and constructive features. Reform in this connection is greatly needed but up to the present has not been successful.

Social problems arise in connection with girls' clothing. An unwholesome manifestation of vanity often appears. Conflicts between desire for physical exercise and the conventions of the period become acute. Often the provision of suitable clothing for the various occasions that arise in the girl's social environment can do much to help in the adjustment of her personality. Here there is especial need for attention to the proper mechanics of clothing in order that every item may allow for correct posture, and general physical well being. Too little attention has been given to

these physical aspects of clothing and practically none to the psychological problems involved.

In these years, it is possible to begin the first training in economical and satisfactory selection of clothing. By including the child in the family's financial councils, he may be trained to discriminate in expenditures.

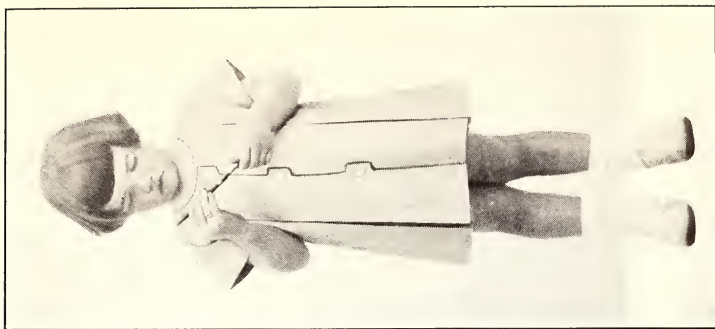
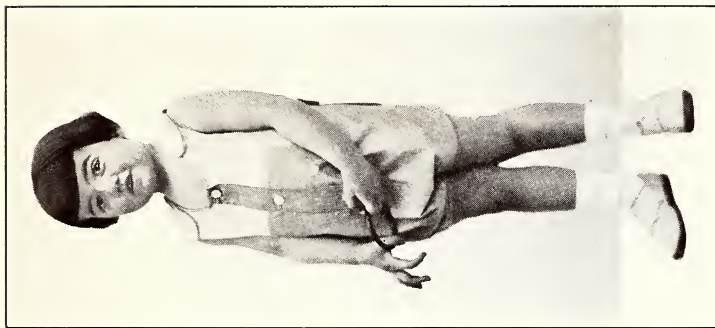
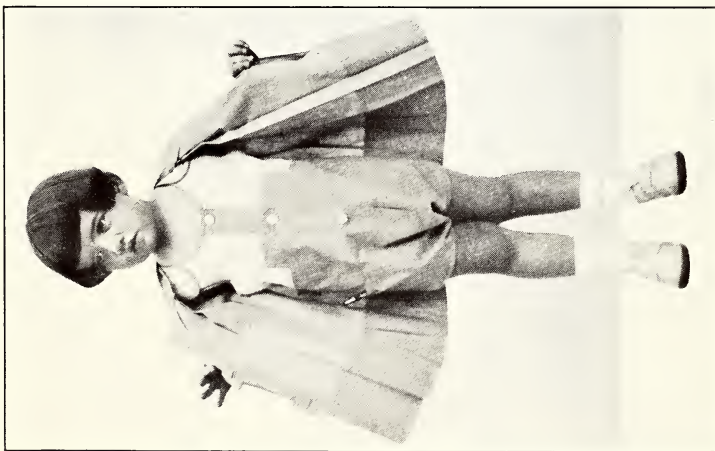
ADOLESCENT PERIOD (TWELVE TO EIGHTEEN YEARS)

During this period when self-consciousness, with the desire for personal adornment, is at its height, unhealthful styles are especially harmful.³⁵ Some physicians have attributed erythema of the limbs to insufficient leg covering,³⁹ and the increase in tuberculosis among young girls to the present craze for very tight brassières and inadequate winter clothing,⁷ while many physical ailments can be traced to the practice of wearing excessively high heels.^{27, 29}

During this period of a girl's life, fashion becomes of paramount importance and conspicuous clothing is in demand. The increased percentage of family income spent for clothing girls at this age is very serious from an economic standpoint and much needs to be done by schools dealing with adolescents to develop an appreciation of proper clothing values. Greater cooperation among teachers and parents and among the parents themselves in setting the proper standards for the group associating in a given community is much needed. The 4-H Club work has been very successful along these lines. Particular attention should be given in connection with character development to increased clothes consciousness and the growing desire to express individuality.

NEEDS IN THE FIELD

There is perhaps no other field in which research—physiological, psychological, and economic—is more needed than in that of clothing. Our knowledge of this subject is in about the same stage of development as that of nutrition fifty years ago. The fact that such research should correlate the principles of physiology, psychology, economics, and the principles of art increases the complexity of the problem.



Courtesy of U. S. Bureau of Home Economics.

CLOTHING EASY TO PUT ON AND OFF ENCOURAGES SELF-RELIANCE.

RECOMMENDATIONS

This Committee strongly recommends that provision be made for adequate research on the relation of clothing to child health. This should include:

- a. Studies on the relation of fiber and fabric construction to those physical properties of fabrics that affect their hygienic value;
- b. Investigations on the effect of fabric and clothing design on the psychological and physiological health of individuals;
- c. Studies looking toward the development of clothing designs which will incorporate sound principles from a physiological and psychological point of view.

It also recommends that research be encouraged and provided for on the economic aspects of clothing consumption. The amount spent on clothing by the average family is appreciable and many of these expenditures are for children's garments. Data on clothing expenditures for children should be gathered and research made upon which recommendations can be offered.

Provision for cooperation between consuming agencies and manufacturers should be made so that the results of scientific investigations of clothing needs of consumers may be reflected in the manufactured products of the country.

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Courtesy of U. S. Bureau of Home Economics.

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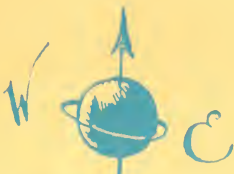
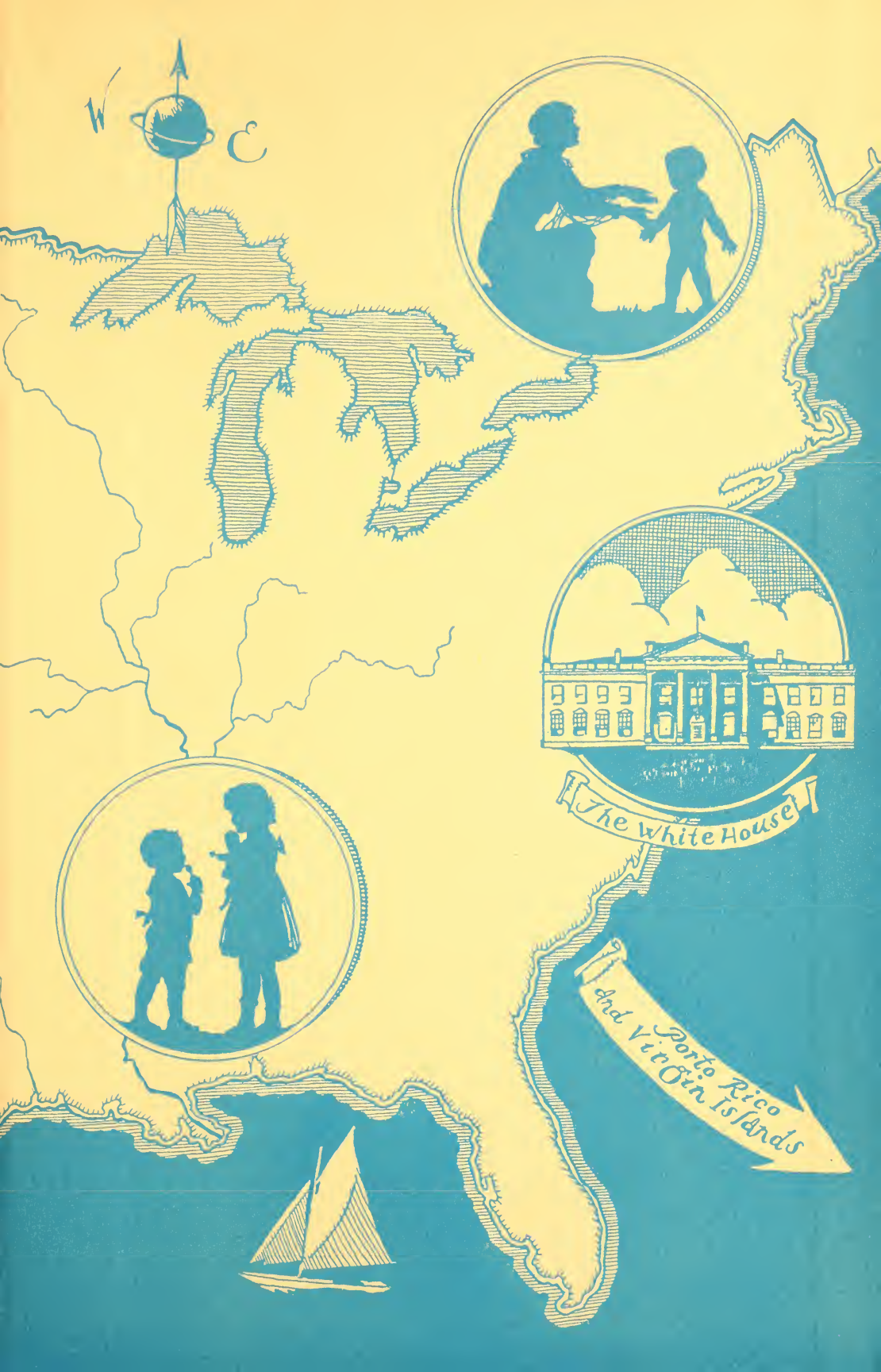
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